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U. D. B. GETS CHAMPION STEER.

The grand champion steer of the International Live Stock Exposition at Chicago, Clear Lake Jute II., was bought on Friday by the United Dressed Beef Company, of New York. President Blumenthal, who was on hand in person, went after the prize and got it. The sale was made by the Bowles Live Stock Company, at \$36 per 100 pounds.

CALFSKINS FOLLOW HIDES.

Calfskins went up four cents a pound in the New York market this week. This jump in price is a tardy following of the upward trend of the hide market. The four-cent increase was so big as to be a surprise, however. Only a one-cent raise was expected, but buyers met the action of one big firm promptly, and everything offered was cleaned up at the high figures. It was predicted that the example of the New York market would be followed elsewhere, and that the higher price would prevail everywhere.

CUDAHY AND PACIFIC FISHERIES.

A report comes from Portland, Ore., that the Cudahys may go into the fish packing industry on the Pacific coast. It is said that when the sale of the Pacific Packing and Navigation Company's assets occurs, December 10, John Cudahy, the Chicago packer, will be represented by a bidder. Should he secure the property, it is said that the successful bidders at the recent Pacific American Fisheries sale at Bellingham, Wash., will assign their interest to Cudahy's representatives, thus giving him control of the largest fishing concerns on the Pacific coast.

SELLING PROVISIONS FOR WAR.

Foreign buyers of canned and barreled meats are increasing their inquiries and orders on the American market. Many large orders have been quietly placed in certain quarters by factories that do not wish to have the names of parties disclosed because of the objection of the shipments and the manner of their delivery. Much of the stuff, however, will reach the Far East and go into the war commissary. While governments are buying, the orders do not always so state. It is enough that Americans are placing these orders and getting the trade.

FOR A UNIFORM OLEO TAX

Despatches from Washington on the eve of the reassembling of Congress give the news that a measure will be introduced at this session to give back to the oleomargarine industry some of the trade rights the infamous Grout law took away from it.

Representative Bontelle of Illinois is said to have framed a bill to make the tax on oleomargarine uniform by imposing 4 cents a pound on the product, whether colored or not. At present the tax is 10 cents a pound on colored and one-quarter of a cent on uncolored oleo. The bill is understood to be in the hands of Representative Payne, chairman of the Ways and Means Committee, and it is further said that those members of the

Ways and Means Committee who have seen the proposition and expressed an opinion in regard to it have said that they were in favor of its passage. This has naturally stirred up the butter people.

Secretary of Agriculture Wilson, apparently anxious to assure the dairy lobby that it had his sympathies, when he was asked if the proposition to reduce the tax and give the packers a chance to rehabilitate their oleomargarine industry would be approved by the department, said:

"You may say for me that it will not. There is in my opinion no more chance of passing that bill than there is of moving the capital of the United States to St. Louis."

BOVINE BACILLI ARE DISTINCT

The Imperial German Tuberculosis Commission has decided that its investigations show that the tuberculosis bacilli of man and the bovine animal are distinct and separate. Cable dispatches report that the Commission met on Saturday and Dr. Weber, one of the most eminent members, reported that the investigations hitherto made showed that bovine and human bacilli were absolutely distinct biologically and one never develops or changes into the other.

An examination of fifty-six bodies of persons who died of tuberculosis showed the presence of human bacilli only in fifty. There were bovine bacilli, however, in six, three of whom were young children. The surmise is

permissible that the latter received the bacillus from the milk of a diseased cow. Two other cases, which Prof. Weber regards as most important, were where corpses showed bovine bacilli in the glands and human bacilli also in other portions of the body. They were distinct cases of double infection. Another important case was that of lung tuberculosis where bovine and human bacilli were associated.

The Commission reached the general conclusion that tuberculosis in human beings was caused by the human bacillus, but urges the careful use of all prescribed measures to prevent infection with the bovine bacillus. The full report will appear later.

UNION PACKING COMPANY NOT SOLD.

There was a rumor on the inner side of trade circles that the Union Packing Company of St. Louis had been bought. The plant has not been sold and is not for sale. The fact is, however, that efforts were made to purchase and a price was offered for it. The refusal of the offer is as far as the sale went. The reported purchase was evidently based upon the above negotiations.

The Union Packing Company of St. Louis is a reorganization of an old plant. The new company is now killing about 2,000 cattle per week. The owners are New York and St. Louis people, all of whom are practical meat men. The concern as now organized is about a year and a half old.

BUTCHERS' STRIKE COLLAPSED.

The "false alarm" strike of the cattle butchers at the Hammand plant in Chicago did not last long. The majority of the men returned to work as individuals on Monday and the strike movement collapsed. There were offers of arbitration from friendly sources, but president McClean very properly replied that there was nothing to arbitrate. The unions met and resolved to extend the strike to all other plants, but the "resoluting" was all there was of it. Last summer's experience of following the advice of professional strike agitators was enough for the men. They were willing to bluff, but when it came to throwing up good jobs they weakened.

ARMOUR SIOUX CITY PLANT OPENED

One of the epoch-marking events of the year in the packing industry was the formal opening on Monday of the new \$1,500,000 packing plant of Armour & Company at Sioux City. The wheels began to turn in earnest this week, and there was a large delegation of distinguished people on hand to honor the occasion. J. Ogden Armour was on his way home from Europe, and he was represented at Sioux City by Arthur Meeker, George J. Brine, Samuel McRoberts and other officers of the company. Edward Tilden and other packinghouse celebrities were present, as well as a full delegation of railroad presidents and high officials.

Sioux City is very proud of the new plant. Business has lulled somewhat since the destruction of the old Armour plant by fire, and the opening of the new and enlarged factory is an occasion for special rejoicing. The plant is one of the finest in the world in equipment and will turn out an immense amount of product from the start. General Manager Lennon and Superintendent of Construction Cunningham had things in apple order for the opening, and Superintendent Duke, of the plant, had his working force well broken in. The Sioux City Commercial

Club gave an elaborate banquet to officials and guests and there was much festivity.

The plant will employ 1,200 people when in full operation. The buildings are a beef cooler, 97 by 132 feet and 100 feet high; a freezer, 97 by 132 feet and 100 feet high; a hog cooler, 129 by 132 feet and 100 feet high; power house, 125 by 50 feet; hog killing house, 80 by 115 feet; pumping house, 29 by 60 feet; machine shop, 48 by 80 feet; office building, 60 by 40 feet; hair plant, 150 by 30 feet; chute, 881 feet long, and ground has just been broken for a fertilizing plant 100 feet square.

The stock chute leading from the stock yards to the top of the plant is one of the features. It is 881 feet long, of steel and cost \$85,000. It is set on concrete bases and only the railing is of wood. One of the new features is the vestibule loading dock. It is a model and few plants in the country are supplied with them. It is 323 feet long, 21 feet wide and 16 feet high. It is air tight and the cars are run close to the side of it. Connection is made by an air-tight chute with the car, so that the meat is in the same temperature from the time it enters the cooling room until it is loaded.

MORE DISTILLERY BEEF

Distillery-fed cattle will be the exception to the beef-feeding rule this season. That is, the indications are that the distilleries will feed more cattle than last season. The distillery feed season is about opening. The last feed year the distilleries fed about 125,000 cattle. This year will feed more than 200,000 head.

The United States Government is making a stir against whisky decoctions and frauds, thereby creating public interest which is adverse to these imitations. That is drawing attention to the subject, and already increasing the demand for legitimate distilled spirits. So pronounced is this trend that the distillery owners have decided to run their plants to their full capacity to meet the demand for the

output. This will have the effect of increasing the production of whiskies by 33 1-3 per cent. and the cattle feeding capacity of the whisky mills by that amount. The high price of 45c. to 60c. per bushel for corn makes the corn market more enticing to the farmer than the beef belly for meat production. Rye, swill and corn mash at the distillery, therefore, become attractive with the live beef market at its present height, with the prospect of the increasing prime beef demand and the scarcity of good native cattle pushing it higher.

The Western distillery centers will feed more cattle than will those in the South because bourbon or straight corn mash will not be as cheap as rye swill. It is not so desirable either, because of ferment.

IS ANOTHER CAR SHORTAGE COMING?

An Eastern railroad traffic manager with a head for figures has estimated that for moving the principal crops of the country grown during 1904 the railroads will receive a gross revenue estimated at \$463,644,051. This information was obtained to give railway men a basis for estimate of the probable income of 1905, and the amount of equipment and power that will be necessary to move the principal agricultural products of the present year. The total crop valuation is estimated at \$5,335,000,000, to move all of which 13,220,908 cars would be required at an average capacity of thirty tons. The transportation tax on the whole would amount to about 8 per cent. of the valuation.

Not all of these farm products, however, will be moved by the railroads, as a great deal of them are destined for home consumption. The estimate of the total number of cars needed to move the crop at once is 5,388,188. Last winter's notable freight blockade may not be a circumstance to this season's transportation troubles when the car shortage begins to be felt.

QUARANTINE CATTLE FEWER.

The rush of what is known as quarantine cattle North is now on. The quarantine against Southern cattle was raised on Nov. 1. This quarantine against cattle from the South is due to the Texas tick. It affects range cattle alone, such as stockers and feeders, and does not affect cattle intended for immediate slaughter. These go North at any time without hindrance. The raising of the quarantine always means a big rush North of range stock each year.

There seem to be arrangements for a smaller haulage this year than last. The late fall in the South creates the fear that the winter will be short, snappy and bitter. The barometers of this movement are the market centers of Kansas City, St. Joseph and St. Louis and these centers do not show an overwhelming rush. The cottonseed oil mills attract a lot of the medium grade beef; the Texas plants at Fort Worth draw off beeves that a big herd makes and the fear of bad range conditions this winter halts more. Feeders are also indifferent, and that throws back a large bunch. Texas and the middle South are learning to

take more care of their own stock and to market them differently.

Another indication of a light movement North of quarantine cattle is the fact that the "boomers," or those herds camping near the line for the early rush over, were fewer this season. The whole situation indicates better Southern cattle conditions and general apathy in the stock and feeder line.

INCREASING TRADE WITH CANADA.

Exports from the United States to Canada during the year about to terminate seem likely to exceed in total value those of any earlier year. The Department of Commerce and Labor, through its Bureau of Statistics, has just prepared a table showing the total commerce of the United States with Canada during the ten months ending with October, also the total imports into the United States from, and exports from the United States to, Canada in each fiscal year from 1850 to and including 1904. The statement shows that the total exports from the United States to Canada in the ten months ending with October, 1904, were \$116,775,656, against \$111,884,763 in the corresponding months of 1903, and \$93,792,394 in the corresponding months of 1902. The fiscal year statement shows that our imports from Canada grew from \$33,264,403 in 1865 to \$51,406,265 in 1904, and that our exports to Canada grew from \$28,829,402 in 1865 to \$131,274,346 in 1904.

WICHITA PLANTS MAY MOVE.

Because the city government of Wichita has refused to give the packing plants at that place proper protection against floods, it is said some of the factories may be moved elsewhere. Enterprising business men of Arkansas City, Kan., have started a bonus movement to get some of the Wichita plants to move to their locality, guaranteeing to them every advantage. The discovery of natural gas at Arkansas City may cut some figure in the matter.

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SECRETARY WILSON'S REPORT

The eighth annual report of the Secretary of Agriculture has been sent to the President. Secretary Wilson's report is voluminous and full of interesting reading matter. It deals with a wide field of subjects and shows the rapidly widening scope of usefulness of this department of the government. Much of the matter contained in the report is a resume of bulletins issued by various bureaus of the department during the year, the facts in which have already been made public in the columns of *The National Provisioner*.

The report comments on the immensity of farm values in this country, both in crops and live stock. Horses and mules reach the highest point this year, with an aggregate value exceeding 1,354 million dollars. On the other hand cattle, sheep, and hogs all show a slight decline. The steady advance in poultry leads to some astonishing figures. The farmers' hens now produce 1 2-3 billions of dozens of eggs and at the high average price of the year the hens during their busy season lay enough eggs in a single month to pay the year's interest on the national debt.

After a careful estimate of the value of the products of the farm during 1904, made within the census scope, it is safe to place the amount at 4,900 million dollars after excluding the value of farm crops fed to live stock in order to avoid duplication of values. This is 9.05 per cent. above the product of 1903, and 31.28 per cent. above that of the census year 1899.

Livestock and Meat Production.

Dealing with livestock and meat production and export, the report continues:

Our animal industry is shown only in small part by the figures giving the exports, yet these exports are so large as to be worthy of notice. The animals exported in the fiscal year 1904 were valued at about \$48,000,000, which was an increase over the previous year of \$13,000,000; the exports of meat and meat products, including oleo oil, oleomargarine and lard compounds, amounted to more than \$174,000,000, a decrease of \$4,000,000 from the year before. We also sent abroad nearly \$6,000,000 worth of dairy products, and of other animal products, such as hides and skins, glue, grease, and grease scrap, over \$5,000,000 worth. The exact total of the above items of export, as given in preliminary returns, was \$223,023,060, which was an increase over the previous year of more than \$12,000,000. The Department is fostering this foreign trade, as well as safeguarding the livestock industry within our country.

The inspections of live stock for export included Canadian animals that pass through territory of the United States; these numbered about 26,000 cattle and 60,000 sheep. The total inspection for export, including these Canadian animals, were 790,496 for cattle, 534,850 for sheep, and 3,293 for horses. As compared with similar figures for the fiscal year 1903, the statement shows an increase of 43.7 per cent. in the number of American cattle exported and an increase of 116.5 per cent. in the number of American sheep exported. The number of horses exported, however, was reduced by one-third.

The inspection of animals and animal products was maintained at 51 establishments and cities. The total number of ante-mortem inspections was about 65,000,000, whereas in 1903 the number was about 59,000,000; this shows an increase of 6,000,000 animals. The post-mortem inspection amounted to nearly 40,000,000, which was an increase, except as to sheep, over the year 1903. The increase in 1904 in the number of hogs inspected post-mortem was over 2,000,000.

The meat-inspection tag or label was af-

fixed to 22,943,067 quarters and 120,404 pieces of beef, 8,230,528 carcasses of sheep, 765,301 carcasses of calves, 1,122,193 carcasses of hogs, and 726,779 sacks of pork. Besides, the meat-inspection stamp was affixed to 23,000,000 packages of meat and meat products that had received the regular post-mortem inspection.

Compared with the figures of 1903, the statement for 1904 shows an increase in beef exports of 47,138,044 pounds, a decrease in mutton exports of 2,016,924 pounds, and an increase of pork exports of 21,319,830 pounds—a net increase of 66,440,950 pounds for all.

The percentage of loss in transit for the 360,990 head of American cattle landed at the ports of London, Liverpool and Glasgow was but 0.17; the percentage of loss for the 212,229 American sheep landed at the same ports was 0.94. The number of clearances of vessels engaged in carrying live stock was 774, and the certificates of inspection issued for American cattle exported to Europe numbered 1,419.

Hog Inspection and Exports.

The falling off in hog exports to certain foreign countries indicated by the report shows the effect of the rigorous restrictions against American pork in force in these countries. The injustice of these restrictions is illustrated by the infinitesimal percentage of trichinous pork discovered out of the total exported, and the thorough system of government inspection which the report reveals also indicates the safeguards which surround our exportation of hogs and hog products. The report says:

In the matter of the microscopic inspection of pork there was a great decrease, from 19,000,000 pounds in 1893 to 9,000,000 in 1904. This inspection is restricted to the pork that is destined for those countries which require such safeguard. The number of carcasses thus inspected in 1904 was 315,045. The number of carcasses found to be trichinous was 2,643.

The cost of the ordinary inspection to the government was \$781,590.95, and the microscopic inspection cost \$53,934.01. Each hog carcass cost the government 17.1 cents for its inspection and each pound of pork exported 0.6 cent.

The government experts dealing with the tuberculosis question have concluded that cattle can be affected by human tuberculosis. On this point the report reads:

The work on the subject of tuberculosis has been conducted throughout the year along lines which have been planned for several years. Some experiments which have been recently reported upon by this bureau go to show conclusively, it is believed, that it is an error to conclude that cattle can not be infected with human tuberculosis. These experiments not only justify but show the desirability of a rigid enforcement of public regulation looking to the control and the eradication of tuberculosis in cattle.

Of renovated butter the report says:

The Bureau of Animal Industry is charged by law with the inspection of dairy products designed for interstate commerce, especially renovated butter. This work is now fully organized under joint agreement between the Treasury Department and the Department of Agriculture. There were 73 factories licensed and bonded, located in 14 States and District of Columbia. The quantity of renovated butter made was about 54,000,000 pounds.

The Borax Investigation.

The report deals at length with the work of the Bureau of Chemistry, the feature of which during 1904 was Dr. Wiley's famous borax report. Secretary Wilson defends Dr. Wiley's conclusions that borax and boracic acid are harmful to the human system when

taken in large or small quantities, but he does not explain how there can be a comparison between the method of Dr. Wiley's experiments and the actual use of borax in food preservation. The secretary recedes a step from the apparently hostile attitude of the department toward borax when he admits that there is a necessity for the use of borax, and that in many cases it would be less harmful than the effects produced by the decomposition of the foods themselves. These conclusions are concealed in the following verbiage:

The argument that small quantities of deleterious substances may be used without harm is not logical, nor can it be based upon the result of the experiments which have been made. On the other hand, the logical conclusion which seems to follow from the data at our disposal is that the use of boric acid and equivalent amounts of borax in certain quantities should be restricted to those cases where the necessity therefor is clearly manifest, and where it is demonstrable that other methods of food preservation are not applicable, and that without the use of such a preservative the deleterious effects produced by the foods themselves by reason of decomposition would be far greater than could possibly come from the use of the preservative in minimum quantities. In these cases it would also follow, apparently as a matter of public information, and especially for the protection of the young, sick, and debilitated, that each article of food should be plainly labeled and branded, so as to show the character and quantity of the preservative employed.

The Boll Weevil Fight.

Concerning the work of the department in the fight against the boll weevil, which has been reported at length in *The National Provisioner*, the secretary says:

The most important work of the Bureau of Entomology during the year has been its combat with the Mexican cotton boll weevil. Under the provisions of the special appropriation of \$250,000, made available last January, this work was greatly enlarged. Over a thousand acres, divided among thirteen experimental farms, were devoted to experimental work, and it is believed that the cultural system these farms were designed to illustrate has so far proved to be the only practicable means of controlling the weevil. This is the outgrowth of several years of experimentation.

The discovery of the Guatemalan ant and its colonization in Texas is a feature of distinct encouragement. The eminent danger of the spread of the weevil, however, to other States indicates the necessity of continued active and energetic work on the part of the general government.

Field experiments have demonstrated that the cultural system of control recommended for the boll weevil furnished the very best means also against the bollworm. Spraying and dusting with arsenical potions and the value of truck crops have been made the subject of careful experiments, and the department is now able to recommend measures which will greatly reduce damage from this pest.

Of the work of the Bureau of Statistics the report says:

On July 1, 1903, the Division of Statistics, one of the oldest, if not the oldest distinctively statistical agency of the Government, was organized as a bureau. It now includes a Division of Domestic Crop Reports, a Division of Foreign Markets, and a Miscellaneous Division. Appreciation of the department's crop reports by the business and farming public steadily grows. A certain amount of criticism is the inevitable result of confidence in the department's reports. For were the reverse true and the reports regarded as unreliable, they would not influence prices, and criticism would be greatly minimized.

FEEDING MUTTON AND WOOL

The fall feeding season for abattoir stock has begun. Feeding tests are being ransacked for standards and proper feeds. The fault of strictly scientific feeding stations is that they are expensively and perfectly equipped. These tests fail to take into consideration the interest on capitalization and the pro rata of high salaries of experts. The conditions in the average feed lot are somewhat different. The heat tests and the food therefor and the water conditions are not as per the formula of the State farm.

The practical feeder must get down to the farm conditions, and to the operation on such stock as he is able to buy in the stockyards and pens in miscellaneous lots. They are not such picked or properly graded stock as those with which the State institution begins its tests. It is interesting, however to note the meat producing capacity of various feeds, inasmuch as the high price of wheat and the relatively high price of corn to that of carcass beef, mutton and pork may make it necessary for the feeder and the farmer to produce a substitute for corn-fed stuff.

Sheep feeding has a wider range of feeds than beef. Both stock sheep and mutton have been selling high; that is, good stock has. Slabs are a drug. Sheep feeding differs from beef feeding in that the flock have different fattening proclivities under two distinct conditions, those of sheared and un-sheared sheep. Hogs and cattle have only one.

At first sight it seems a remarkable circumstance that sheep gain faster after being sheared than before. A second thought will show that this is a natural consequence after the removal of the coat. In the first place feed is as necessary to sustain the life and growing body of the wool as it is that of the animal itself; secondly, the wool in the hot season rather tends to swet and fret off fatty tissue and flesh than it does to put on avoirdupois. The feeding season is mostly in the temperate part of the year.

Peculiar Feed Effects.

The eccentricity of feeds in the same carcass seems at variance somewhat with the scientific analyses of the food value of the feeds themselves. Some substances have richer stated values than others when considered abstractly. They often produce less gain than the inferior feeds when applied to the same animal species at the same place and under identical climatic and other conditions. Corn, for instance, is generally more nutritious than macaroni or common wheat than the same substance, yet macaroni produces more weight after shearing than corn or wheat. It takes 6.6 lbs. of corn to produce 1.0 lb. of gain, and 4.2 lbs. of wheat per 1 lb. of gain in the same time that the 3.5 lbs. of macaroni take to produce the same gain. Before shearing common wheat and macaroni both become fully 50 per cent. inferior to corn as a gain maker on the sheep carcass, as compared with their respective sheared lot records, corn producing 1 lb. for each 5.4 lbs.; wheat, 1 lb. for each 5.7 lbs., and macaroni 1 lb. for each 6.0 lbs. in the same quantities and time that the three feeds took to produce the former results.

This indicates to the sheep man that wheat

and macaroni are not wool weight producers—the former the lesser of the two—and that corn is an all-round average wool and carcass producer, proving its efficacy before the wool has been removed. The tests made to obtain these results show that while corn was producing 1 lb. for each 6.6 lbs. of gain on a sheared sheep, macaroni was producing 1 lb. for only 3.5 lbs., or less than nearly twice as much. Macaroni lessens its efficacy in weight producing upon a full woolled sheep. Thus, the grower of wool as a main crop should avoid macaroni and rather stick to corn or wheat, if he has the choice of no other feeds.

The highest average results have been obtained by the use of speltz. This is the best single feed for both wool and carcass production. The gain is virtually the same, whether given to the woolled or the sheared sheep in the feed lot. The gain before shearing on speltz was 1 lb. for each 7.4 lbs. before and 7.3 lbs. after shearing per unit of time during the entire feeding season.

While the straight feed has some financial advantages, according to proximity to the market for the stuff, combination feeds both show better results and, often, more profits. They also show some remarkable eccentricities. A combination of macaroni and speltz is a striking example of this freak result, both on the woolled and the sheared sheep. While macaroni will produce 1 lb. of gain for each 6.0 lbs. of wool and speltz 7.4 lbs., in a given time used in the same quantities before shearing, a mixed ration of the two feeds produces the same gain for 7.1 lbs., or less than the average of the two, which is in the ratio of 1 lb. for each 6.7 lbs.

Results With Sheared Sheep.

The phenomena of growth and feeds are even more remarkable when applied to sheared sheep. The same combination and quantities of speltz and macaroni fed to sheared sheep in the same time produced 1 lb. for each 8.7 lbs., which is 1.6 lbs. more of feed than these combined feeds needed to produce the same gain on the unsheared sheep, and 1.3 lbs. more feed than was required to get results produced the same gain by either of them singly upon the sheared or the unsheared sheep. Barley and speltz make the next lowest weight gainers on unsheared, but not on sheared sheep. Barley alone, by comparison, produced 1 lb. for each 6.0 lbs. of feed on the unsheared, while it produced the same gain with 6.7 lbs. on the unsheared sheep. The two combined at the same time and under the same conditions, produced 1 lb. gain for each 6.0 lbs. of feed on the unsheared and the same for 8.4 lbs. of feed on the defleeced sheep.

Corn and speltz combined have a losing percentage on unsheared as compared with sheared sheep. The mixture does not produce the highest results in either case; the gains are: 1 lb. for each 6.5 lbs. on unsheared, and the same gain for 5.0 lbs. of feed on sheared sheep. Either of these feeds produces worse average results alone. Millet may be a cheaper provender, but it produces 1 lb. of gain for each 5.9 lbs. of feed on the unsheared and the same for each 5.3 lbs. on sheared sheep. Oats produce 1 lb. of gain for every

6.5 lbs. of feed and 6.2 lbs., respectively on the two classes in the feed lots.

As many sheep enter the feed lots before shearing and go out fleeced, or vice versa, the importance of the best average feed becomes more prominent. Taking them on their net results, there can be no question about their relative importance as given in the following order, based upon the average results upon both classes of sheep during the same feeding period: Macaroni, wheat, corn and millet. For growing meat on a sheared carcass the following is the comparative value of the best feeds: Macaroni, wheat, corn and speltz, millet and oats. For growing wool and carcass weight combined on the unsheared sheep: Corn, wheat, millet, macaroni, barley and barley and speltz. The combination feeds are generally slower gain producers on both the sheared and the unsheared sheep.

The relative cost of producing a given pound of gain depends upon the market for feed products and the cost of keeping and administering the same. The general results of the best tests in this country under varied climatic conditions show that it takes more food to produce a pound of gain before than after shearing. The food must produce both the wool and the flesh body. The latter grows or fills faster than the former. The general experience in the feeding test is that macaroni wheat is very slightly more satisfactory for average feeding than common wheat. It is decidedly better for meat producing on the unsheared and almost as decidedly unproducing on the woolled sheep. Climate and latitude has much to do with the results. What is best in the Dakotas may not be so in Colorado. The general result is comparatively the same in a given climate.

Lamb feeding is not uniform with sheep feeding. The same feeds do not show even the same relative results. The question of age and the growing factor enter into the problem. The several feeds do not differ so materially in the lamb feed lots as in those of the sheep.

Recent exhaustive tests show the following results:

	Un-sheared.	Sheared.	Total gain. lbs.
Wheat .....	.27	.35	31.5
Macaroni and wheat..	.26	.41	31.5
Oats .....	.25	.26	27.6
Barley .....	.26	.22	28.5
Speltz .....	.22	.22	24.8
Millet .....	.27	.33	31.2
Corn .....	.29	.23	30.5
Corn and speltz.....	.24	.27	30.2
Barley and speltz....	.28	.20	29.8
Macaroni and speltz..	.22	.16	23.3

This table shows the average daily gains in pounds of the lambs before and after shearing and the total gain per lamb during the whole feeding period. These general results show the feeder his problem. He has the market cost to figure.

SUED SEVERAL PACKERS.

An employee of one of the packing plants at St. Joseph, Mo., has brought suit against three big packing concerns asking \$20,000 damages because he claims he cannot secure employment. He was a weighmaster at one of the plants at the time of the late strike, and he joined the strikers. Now he wants his place back and because he cannot get it he has asked for \$20,000.

NATIONAL LIVESTOCK CONVENTION.

The official call for the eighth annual convention of the National Livestock Association, at Denver, January 10 to 14, has been issued, and it reveals the extent of the new reform plans of the association. It is practically admitted that the association has been a failure on the lines of its management up to this time. A new policy is to be adopted, and the new blood at the helm hopes to pull the movement up out of the mud and make it a real power in the livestock and meat world.

With that end in view the association will ask representatives of the railroads, the packers and other affected interests to attend the Denver convention and to become active participants in the meeting, with full voting power and on a standing equal to that of any stockman in the association as regards shaping the policy and determining the action of the body. The sheepmen are again approached with conciliatory offers and the effort is to unite all factors in a harmonious and effective whole.

What action the railroads, the packers and the other outside interests will take in response to the invitation to participate, and to thereby commit themselves to whatever policy the convention may adopt, remains to be seen. Portions of the official call read as follows:

To the Members and All Persons Engaged in the Livestock Industry: The eighth annual convention of the National Livestock Association is hereby called to meet in Denver, Colorado, January 10-14, 1905. In the opinion of a large number of the members of this association, a condition exists which makes it necessary to consider a revision of the constitution and by-laws of this organization, so as to provide for a more liberal representation of the various branches of the livestock industry upon a business basis that will permit of active co-operation, without unnecessary interference with the affairs of any interest. By order of the board of control, therefore, the representatives of all interests involved in the breeding, growing, feeding, transportation, marketing and manufacture of livestock are hereby invited to attend this convention and participate in a general conference, looking toward such revision and amendment to the constitution and by-laws of this association as will produce a more active and harmonious co-operation between the various branches of the livestock industry.

It has been suggested that the constitution and by-laws of the association be revised at this meeting so as to recognize, as the basis of organization, the various branches and interests of the livestock industry, allowing each branch a representation in the association upon such plan as will permit of the fullest co-operation without interference. Owing to the nature of this industry, each branch has affairs peculiar to itself, and in which no other branch is directly interested. It is possible, and does sometimes happen, that the method by which one branch of the industry conducts its affairs causes loss and inconvenience to another branch. Such methods may cause misunderstanding. It is proposed by the new plan of organization to provide a method by which such matters may be considered, discussed and argued by representatives of the various branches directly interested, and it is believed that, by such method, misunderstandings may be avoided, injustice remedied, and wrongs righted. By such a method of organization, also, where the interests of all are mutual, concerted and united action can be secured with certain results.

As this convention must be organized according to the present constitution and by-laws, representation will be as provided by the constitution, but upon the organization of the convention, the executive committee will propose to the convention a resolution as follows: "Resolved, That, for the purpose of consid-

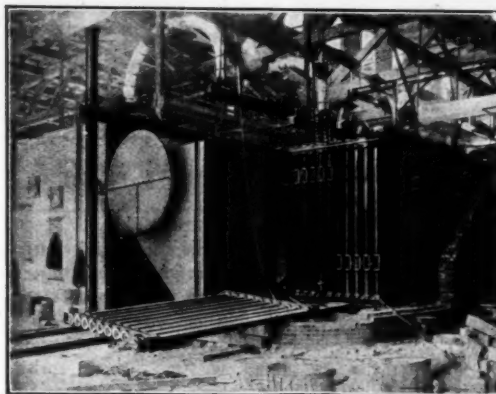
ering a revision of the constitution and by-laws, that a committee be appointed, consisting of three representatives from each of the following interests: cattle growers, sheep growers, stock feeders, swine growers, railroads, packing houses, stock yards, commission men, and pure-bred record associations. Said representatives may be suggested by those in the convention representing the various interests named, or they may be named by the president. Said committee shall meet at once and report back to this convention as soon as possible, with such recommendations as it may decide upon."

As this will be the principal business of this convention, an invitation is hereby extended to all organized branches of the industry to be represented at this meeting, prepared to suggest members of the committee above referred to and to take part in the subsequent business of the convention. An especial invitation is extended to the National Wool Growers' Association, the Interstate Cattle Growers' Committee, livestock exchanges, Union Stock Yards companies, trunk lines of railroads and packing companies.

For the purpose of saving time and providing a basis of action for the special committee, the president of this association has appointed W. A. Harris, Fred P. Johnson, F. J. Hagenbarth, Murdo Mackenzie and Alvin H. Sanders as a committee on the part of this association, to prepare and present to the special committee to be appointed by the convention, details of a plan for a revised constitution and by-laws as suggested above. Said detailed plan is simply to form a basis for discussion and action by the committee.

While the convention will consider the matter of constitution revision as the principal business, other matters of great importance to the industry will be discussed. It is expected that the president of the United States will have called the attention of Congress to the necessity of more modern laws for the regulation of the use of the public lands for grazing purposes, a matter which is of vital importance to the industry. This matter will, therefore, come up for consideration. Other matters in which national legislation is being sought, such as the necessity of a frequent stock census, the amendment of the interstate commerce law, will also come up for consideration.

For bargains in equipment or business chances, see page 48.

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PUBLIC ABATTOIRS NOT IN FAVOR.

The public abattoir plan has had a very general and thorough test in many British cities, and the verdict has been decidedly against this plan of killing as compared with the conduct of meat plants by private enterprise. There are still the public utilities ownership theorists all over the United Kingdom who preach public abattoirs, but municipal officials who have had the experience are quick to testify against the method and to protest against its further adoption.

At a recent meeting of the Cheshire Butchers' Association the mayor of Chester advocated the more general establishment in England of public abattoirs. An ex-president of the Birkenhead Association who was present promptly pointed out that the Birkenhead abattoir was carried on at a loss of \$2,000 per annum, and he warned Chester against having one. The experience of Birkenhead was said to be a sample of that elsewhere in England, where municipal killing had been tried.

AMERICAN BACON IN ENGLAND.

Reports from Liverpool and other British markets indicate dulness in the market for American bacon, due to the slack demand. Although expectations of moderate Atlantic shipments have had a restraining effect upon holders, large movements and easier prices of hogs advised from Chicago, together with the relative cheapness of Danish and Canadian products, militate against improvement in the situation, and changes in values are found to be in buyers' favor.

HENRY KRUG, SR., DEAD.

Henry Krug, Sr., president of the Henry Krug Packing Company and president of the German-American Bank of St. Joseph, died on Wednesday at St. Joseph from a stroke of paralysis. He leaves a large fortune. Mr. Krug was 83 years of age and was one of the veterans of the trade.

TRADE GLEANINGS

Florida Packing Company, of Jacksonville, Fla., has been incorporated with \$100,000 capital to build a meat packing plant with capacity for 150 cattle, 200 hogs and 100 sheep daily on outskirts of Jacksonville. A complete ice plant will be required. All by products are to be utilized. Francis P. Conroy is president; C. W. Richardson, vice-president; Charles E. Smith secretary, and R. E. Emgleton, treasurer.

It is said that Armour & Company will build a fertilizer plant at Shreveport, La., and that Geo. C. Vernard is seeking a site for it at that place.

Bucher & Woodford Packing Company, of Cairo, Ill., are contemplating many improvements at their plant, among them being the erection of a meat cooler.

C. Schmidt & Company, of Cincinnati, O., dealers in butchers' supplies, will build a two and a half-story brick factory.

The Rome Soap Manufacturing Company, of Rome, N. Y., will add two new kettles each of 125,000 lbs. capacity and a new lye kettle of same size, besides new machinery to increase output.

Myron E. Meyer Manufacturing Company, of Milwaukee, Wis., has been chartered with \$10,000 to make soap and chemical cleansers. The incorporators are A. V. Jacobus, Myron E. Meyer and A. V. Klefisch.

An addition will be built to the plant of the Miller Fertilizer Company at Canton, O.

The Wallin Leather Company is building an annex to its plant at Grand Rapids, Mich., in the form of a two-story brick building.

Zehner Brothers Packing Company, of Bellevue, O., is to move to Toledo and establish there a large plant adjacent to the Toledo Union Stock Yards Company's new sheds and yards now nearly completed.

The Winchester Packing Company, of Hutchinson, Kas., is building a new plant for its hog killing operations. The building will be 60 x 90 feet, three stories high, of brick.

North American Meat Company, of Jersey City, N. J., has been incorporated by Millard F. Tompkins, James B. Mackie, William W. Gooch, Kenneth K. McLaren and Louis B. Dailey with \$100,000, to deal in cattle, meats, fish, etc.

The Improved Smoking Process Company, of New York City, has been incorporated. The capital is \$30,000 and the object is to build and equip smoke houses. The directors are Max Brand, William Eppinger and N. Adelsorfer.

George H. Swift went from Chicago to Omaha to take charge of the Omaha plant temporarily until a successor should be decided on for Manager Patterson, who resigned to become general manager of the National Packing Company under President S. A. McClean, Jr.

ITALIAN PURE FOOD SCHEME.

Italian food exporters have a plan for getting around the difficulties of pure food inspection of importations into the United States. There was established at Genoa some five years ago by private parties an enterprise called the Controlo Permanente Italiano, the Italian Society of Permanent Chemical Inspection, for the analysis of food products and official certification of their purity.

STEEL TANKS OF EVERY DESCRIPTION AND ANY CAPACITY



STEEL STORAGE TANKS, CAR TANKS, GRAIN TANKS, TANK CARS, CYLINDER TANKS, PRESSURE TANKS, STEEP TANKS, LARD, SOAP AND REFINING KETTLES, RENDERING TANKS, STILLs, BOXES, PANS, SHELLS, STACKS, BLOW CASES, RIVETED PIPE, GENERAL PLATE WORK.

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The commercial firms subscribing to it stamp their food products with its guarantee, and a purchaser has at any time the right to request free an analysis of any sample he may send in. The enterprise has obtained the adherence of a very considerable number of the best houses and controls food preparations to the number of 500 different kinds. It is expected that the confidence thus aroused will give the subscribers a great advantage over others in the market, and should the system become general they believe it would also greatly smooth the way of the inspection of Italian food products sent into the United States.

THE MICROBE FOOD CRANK.

A railroad doctor is now engaged in the task of trying to make turkeys a drug on the market by announcing the startling proposition that ptomaines kill more people than the plague. He then leaps to the conclusion that cold storage turkeys are but a means for the spread of ptomaines. He says that more passengers and employees are killed by railroad food than by any other diet arrangement in the country. He doesn't trace any of this to continuous inactivity or stuffy cars, but lays it all on cold storage turkeys and other conserved foods. The city poultry dealers are also hit because they do not dress the poultry before storage. Well, how about rabbits and deer and a lot of other flesh foods? Theorizing is a pleasant mental recreation. It is not always logical.

ITALY FEELS OUR COMPETITION.

Feeling the effects of American competition in the provision trade, and taking their cue from the course of their German brethren, pork packers and other meat producers of Italy are endeavoring to induce their government to follow the German lead in imposing oppressive restrictions on American meat importations. Representatives of the principal

Italian firms interested in the pork and allied trades have met at Milan to protest against American competition, which, they declare, is ruining their business. They decided to call upon the government for a very strict inspection of all importations from the United States to aid them in coping with American competition, which they resolved to combat by every legal means.

COTTON SEED OIL NOTES.

The Mississippi Cotton Oil Company, of Aberdeen, Miss., is preparing to build a fertilizer plant. It will also increase the capacity of its oil mill and ice plant.

The Delta Oil Company, of Greenville, Miss., will increase its capital from \$60,000 to \$100,000 and enlarge its plant. These changes will be made at once.

The cotton gin of the Tupelo Oil and Ice Company, at Tupelo, Miss., was burned last week. Loss, \$4,500.

THE

TRADE

CAN ALWAYS

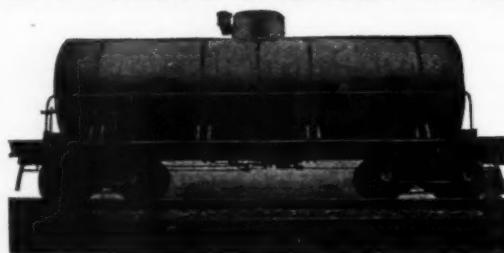
GLEAN

BARGAINS

BY KEEPING AN EYE ON

PAGE 48

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WARREN, O.

MEXICO'S LIVESTOCK AND MEAT.

It is difficult to get at the exact number of head of livestock in the republic of Mexico. For some time past the states there have been endeavoring to collect reliable data on that subject. This has been a long and tedious task. The summary of the available figures gives a conservative estimate of the animal population of our neighbor up to the end of 1903. The figures are an underestimate. The correct figures would probably be 10 per cent. more than those at hand. The tabulation of the reports gives the following census of the edible livestock of Mexico:

	Head.	Value.
Cattle	6,200,000	\$99,200,000
Sheep	3,500,000	6,250,000
Hogs	700,000	2,500,000
Goats	4,300,000	7,510,000
Totals	14,700,000	\$115,460,000

Those outside of the republic who have surmised the extent of the livestock of Mexico have given the country credit for 10,000,000 cattle. The remarkable feature of the Mexican livestock industry is the number of goats over there. There are nearly 1,000,000 more of them than sheep. These either enter largely into the rural diet or are exported to the surrounding countries. The goat has nearly as high a value per head as the sheep of Mexico. This dispels the idea that goats are shipped to the United States for use in the abattoirs. The Mexican goat is worth \$1.70 per head in Mexico and the Mexican sheep \$1.79 per head there. But as the wool of the sheep is worth much more than the goat fleece, the goat is really the dearer animal for food purposes or for the available market there or abroad.

The little Pacific slope state of Jalisco (33,486 square miles) contains the most cattle of any of the states of Mexico. In the seven states of Jalisco, Michoacan, Chihuahua, Vera Cruz, Guanajuato, Sonora and Durango are nearly half of the cattle of all Mexico, though cattle raising is general all over the republic. There are 2,600,000 head in the above named states. The remainder of the herds are scattered through the other twenty-three states and territories of the country. The cattle States of Mexico rank in the importance of their herds as follows: Jalisco, Michoacan, Chihuahua, Vera Cruz, Guanajuato, Sonora and Durango. The other states are of minor importance.

With the exception of Chihuahua, all of the important Mexican cattle raising states are located on the coasts. The most popular breed there for all climates is the Holstein; but the Swiss cattle get on well on the table lands, like those of the Valley of Mexico. They do not thrive on the mountain sides.

While the average price of a goat is less than that of a sheep, the better grade of goats outsell the better grades of sheep. The prices for goats run from \$1 to \$3 per head, while those for sheep range from \$1 to \$2 per head in Mexico.

Lesson of Export Statistics.

The export figures of Mexico teach a lesson which is contrary to the conclusions generally drawn by the American retail meat trade and general public. While the tariff against cattle across the Rio Grande has re-

mained about the same and the demand for beefs has grown, the exports of cattle from Mexico during the past eight years have generally declined. The following are the Republic's own export figures:

	Head.
1895-6	238,998
1896-7	313,633
1897-8	227,336
1898-9	160,028
1899-00	184,165
1900-1	197,624
1901-2	166,479
1902-3	213,649

While the export of live cattle seems to have become fixedly less, that of hides has increased as follows:

	Kilos.
1900	8,252,000
1901	10,383,000
1902	13,000,000

The five chief goat states in their order of importance are: Nuevo Leon, Coahuila, Durango, San Luis Potosi and Zacatecas, having from 430,000 to 920,000 head each. The five chief sheep states are: Zacatecas, San Luis Potosi, Durango and Puebla, in their order. They have from 230,000 to 850,000 sheep each.

Mexico's Industrial Problem.

Mexico presents this industrial problem: Though there are about 8,000,000 sheep and goats in the republic, the country does not possess enough wool and hair annually to supply the home factories and hand weavers. To meet this deficiency the following quantities are imported:

	Carded Lbs.	Unwashed Lbs.
1899-00	29,767	2,100,000
1900-1	69,961	2,350,000
1901-2	101,000	680,000

The complete consumption of the locally sheared fleece in the country is shown by the fact that only the following small quantities of wool were exported from Mexico:

	Lbs.
1899-00	66,614
1900-1	22
1901-2	1,736

The home consumption of both the wool and the sheep skin by the Mexicans may be seen from the fact that only the following small amount of sheep skins was exported:

	Lbs.
1899-00	1,915
1900-1	2,191
1901-2	1,682

The inference that the live goat is not sent abroad either under the heading of "sheep" or "goat" in the lists is manifest in the fact that only 13,836 head of both were exported in 1900, 4,039 in 1901, and 6,821 in 1902. The Mexican evidently is fond of goat meat and a large herd of goats are slaughtered annually for food purposes. After supplying the local market with the mohair, the skins go to the foreign market, principally New York, which pays the highest price for good pelts. The following quantities of dried goat skins have left Mexico yearly:

	Lbs.
1900	4,252,000
1901	5,100,000
1902	5,860,000

The figures show a steady increase in this trade of the outside world with the Republic.

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The state of Chihuahua is the most progressive of all the states of Mexico from a meat and provision factory point of view. The ham and bacon factories of the state are becoming larger and more important. There are large lard and soap factories at Monterey. There are rendering and soap plants in other cities of this state. These factories import a lot of outside soap stock to keep them going. Mexico takes our lard and sends us hog and other hair bristles. It is a curious reciprocal trade. The figures are as follows:

	Imports of Lard Lbs.	Exports of Bristles Lbs.
1900	9,180,000	333,300
1901	9,600,000	364,000
1902	11,100,000	335,000

A review of the Mexican livestock and meat industry dispels much of the idea that the country is overflowing with stock in excess of the local requirements, or that export cattle and sheep are cheap enough to compete at long distance with foreign cattle that have not to pay the cost of transportation and stand the expense of feed or the loss by shrinkage. Labor is cheap, but lazy and trifling as well as stupid, and requires costly supervision. Mexico, with a different class of people would be a busier and more prosperous, but possibly a less happy country.

SHEEP WITHOUT WOOL.

The United States Department of Agriculture is making experiments in the raising of woolless sheep. Some of this peculiar strain have been brought from the Barbadoes, in the West Indies. These are now quartered at Bethesda, Md., just outside of the District of Columbia. Though these sheep have no wool whatever on them in their natural habitat, one of those imported has already begun to grow quite a bit of wool on its neck and shoulders. Nature is sensitive and begins early to give the hint that Maryland is colder than the Barbadoes.

The intention is to send the sheep to the

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 Ft. Greene Sheep Market, 172 Ft. Greene Place

West 39th Street Market, 668-670 West 39th Street
 Westchester Avenue Market, 769-771 Westchester Avenue
 West Harlem Market, 130th Street and Twelfth Avenue
 Eleventh Avenue Market, Eleventh Avenue, bet. 34th and 35th Streets
 Murray Hill Market, Foot East 31st Street
 West Side Slaughter House } 664-666 West 39th Street
 West Side Market }

JERSEY CITY

Wayne Street Market, Corner Wayne and Grove Streets
 Ninth Street Market, 138 Ninth Street

Swift & Company New York

Central Office, Nos. 32-34 Tenth Avenue

extreme South, where the oppressive summer heat militates against the profitable growth of sheep and wool. The government forgets two facts: First, that the greatest sheep and wool countries in the world are the Australia and Argentine. In Australia the sheep carcass is secondary to the growth of wool, and the flock is most prolific in the warmer climates. Second, that it would not be a profitable proposition to grow woolless sheep, inasmuch as the fleece is worth nearly as much as the balance of the animal, and because of the further fact that a dark flesh will not sell so well. This has been found true in the sale of the carcasses of black sheep and of the black goat. The flesh of

such is darker than that of the white-haired or white-faced animal.

The woolless sheep is not peculiar to the Barbadoes. The species exists in Africa, and the West Indian kind probably came from the Dark Continent. They are goaty in their habits and hardy. That affords the probable reason for their stronger flavor, or the lack of delicate lamb flavor, though the stronger viand is highly regarded both by the Africans and the West Indians. It is an acquired taste to those who have not been reared in the same climate.

These woolless sheep have neither horns nor fleece. They are medium in size. They look more like miniature Jersey cattle than

sheep. A close inspection creates the goat idea. Their color is a sort of yellow fawn, which is marked with black that lightens into brown on the hind quarters. These sheep are what butchers call "leggy" and have deep bodies. Though woolless, they are not smooth-skinned. Their bodies are covered with a good coat of coarse hair. They grow heavy, as the American trade views sheep. The yearling weighs about 80 lbs., so that a woolless spring lamb would be a pretty big proposition from a carcass point of view. While the experiment is welcomed, the fear exists that they will be no more available in our meat trade than is the Angora goat.

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COLD STORAGE FOOD TESTS

The federal government is about commencing a series of dietetic tests with cold storage foods. These experiments will be upon a class of volunteers who will be under the supervision of the Chief Chemist of the United States Department of Agriculture, and will be made with various short and long stored foods, such as beef, mutton, veal, eggs, butter, lard and such products that have been in the refrigerator over periods of from two weeks to two years. The Chief Chemist has already made the public announcement that foods cold stored over three or six months are injured thereby. Whether the present series of tests are intended to verify that position or to reverse it, or whether the supervisor enters upon the series with a free or prejudiced mind is not manifest. The chances are that a leaning will be towards preconceived opinions.

It would seem possible to test the nutritive value of the same foods by analyzing them when entering the cold store and, again, at their exit therefrom two years later. Both their chemical changes and comparative dietetic value might thus be determined. The same foods should also be subjected to the chemical and the eating tests just before they

go into storage. The stored food squad should be paralleled with a fresh food class for contemporary comparative data. Just how the Chief Chemist is going to find the chemical and dietetic changes in the same food upon the same stomach before storage, two weeks after storage and after two years of storage, is not disclosed. These comparative tests of the same foods upon the same subjects are necessary to give any definite value to the tests.

The "school" may be kept at work over the whole period. But, in that time, the volunteers themselves may have developed gastric changes and otherwise change the premises, in so far as the stomach is a factor in the general proposition. The feeding of fresh beef of one animal or section of the country for a season, and then that of other animals from cold storage of various periods may give an idea. If the experiments are made also in the inverse order it might be found that fresh meat, for instance, following a cold storage diet, might produce as many or more gastronomic disorders than cold storage foods following upon a strictly fresh meat diet. The tests cannot, in any sense, be conclusive. They can only be indicative.

The squad was weighed in last week, the physical condition of each noted and meal tickets issued. The full diet will not be absolutely upon cold storage foods. The tests will be made with one or two of these at a time and the series of experiments will run far into 1905. In fact, both summer and winter experiments should be made, as summer brings less disorder from refrigerator than it does from so-called fresh or green foods of the flesh variety.

The scientific and the factory world are both interested in the outcome. Whatever the conclusion, there will still remain the question of the comparative value of cold stored meats, butter, etc., and those unstored which have become stale or partially decomposed before being eaten. Refrigeration avoids the necessity of eating the bulk of our food in the latter state.

NEW PURE FOOD CENSORS

The pure food agitation has taken a novel turn. The hotel and club stewards of Atlantic City have decided to take a stand against what they are pleased to term "doctored foods." The trouble about these stewards is that they are not experts and they are always on the financial pose, with their hands behind their backs for tips. Among the "doctored" foods listed is oleomargarine, which by the way is confessedly a compound, and is not doctored at all. The fear may therefore be entertained that the stewards have been duly tipped and their judgment biased by financial pressure. At a recent

meeting of the Atlantic City stewards vigorous resolutions were presented against the repeal of the Grout law. The Seacoast Hotel and Club stewards have asked Chief Chemist Wiley to designate a chemist who may analyze foods at their behest. He has complied.

Just what control the stewards will have over the food question remains to be seen. It is a terrible temptation to "graft" and these very conservators of diet may be turned into a frightful menace to health. It may finally resolve itself into a case of the highest tips to get your brand on the bill of fare. With Mr. Customer tipping "Jeems" at the table and Mr. Manufacturer tipping the steward in the kitchen, the eating public may consider itself held up at both ends, caught "coming and going."

CONGRESS MEETS MONDAY

Congress will meet on Monday. It is the purpose of the leaders of the dominant party to make the session one of little important business. The new Congress will have life after March 4th, and the legislation which will cause delay will be shunted to that session or shelved.

It is the present purpose of many prominent Congressmen to force a hearing and possible passage of the Pure Food Bill which is pending. Even this may be side-tracked at the last moment. The system of rebates now in vogue will be used to serve the exigencies of the tariff situation until that important subject is seriously before the national legislature. There is aversion to tariff tinkering. The minority will call for what is known as the beef report. Something will be heard of the hide and skin duty, but these questions will not delay or trouble Congress very much before March. In spite of these eliminations there will be a short, busy session in dealing with the important bills now awaiting action. What shape the Grout law repeal agitation will take remains to be seen.

SHOULD IDENTIFY FOODS

The farmers are already being agitated by the factory end of the dairy industry. They are in fear that the incoming Congress will take up the question of the modification or repeal of the Grout oleomargarine law. If the government does neither of these things it should at least carry the fight into the butter ranks in an effort to have a clean and wholesome butter supply. Congress should also uncover the color fraud in butter, by which inferior grease is tinted and sold for what it is not, viz.: rich creamery butter. All stuffs should be sold for what they are and should be prohibited sale for what they are not. This should apply as relentlessly to butter as to oleomargarine.

TECHNICAL AND SCIENTIFIC

GELATIN.

When intercellular, connective tissues as met with in skin, tendons, ligaments and the fasciae of the muscles, of which it forms the basis, is treated with water, preferably hot, or in the presence of dilute acids, for some time, a solution is obtained which in cooling solidifies to a jelly. The dissolved substance bears the name of gelatin or glutin.

The same substance is obtained when the matrix of bones is submitted to similar treatment, after previous removal of the lime salts by means of mineral acids. Again, when unossified cartilage, as for instance the bone cartilages of the vertebrate foetus, is treated with water or dilute acids, a solution is obtained which also gelatinizes on cooling. The coagulation in this case, however, is due, not to gelatin, but to a closely allied substance called chondrin.

True gelatinous tissue occurs in all mature vertebrates. In the embryo it does not appear till late in foetal life, chondrin being found instead, and the change which brings gelatin into the place of chondrin is effected, not by a metamorphosis of the latter, but by its removal and the independent formation of gelatin. Gelatin, as such, is not met with in any of the normal fluids of the body, but occurs in the blood in cases of leukaemia.

Various qualities of impure gelatin are prepared on the large scale by boiling up the trimmings of oxhides, skins of calves and spongy parts of horns. From any of the crude gelatin the pure substance may be obtained by bleaching with sulphurous acid and steeping repeatedly in warm water, when in the state of a soft jelly. Pure gelatin is an amorphous, brittle, nearly transparent substance, faintly yellow, tasteless and inodorous, neutral to vegetable colors and unaltered by exposure to dry air.

According to Wanklyn, gelatin is distinctly differentiated from such substances as casein and albumin by a marked difference in behavior when treated successively with boiling potash or alkaline permanganate. Although gelatin in a dry state is unalterable by exposure to air, its solution exhibits, like all the proteids, a remarkable tendency to putrefaction, but a characteristic feature of this process in the case of gelatin is that the solution assumes a transient acid reaction. The ultimate products of this decomposition are the same as are produced by prolonged boiling with acid. It has been found that oxalic acid, over and above the action common to all dilute acids of preventing the solidification of gelatin solutions has the further property of preventing in a large measure this tendency to putrefy when the gelatin is treated with hot solutions of this acid and then freed from adhering acid by means of carbonate of lime. Gelatin so treated has been called metagelatin.

Strange to say, in spite of the marked tendency of gelatin solutions to develop ferment organisms and undergo putrefaction, the stability of the substance in the dry state is such that it has been used, and with some success, as a means of preserving perishable foods.

GELATIN SOUP IN FRANCE.

As bones are capable of yielding one-third of their weight of solid gelatin, it follows that if gelatin had a value equivalent to albuminoids the bones of an animal would contain one-fifth of the total nutritive material in its body. Accordingly, at a time when gelatin was in high esteem for its food value recourse was had largely to this source, more especially in France, for a cheap nutritive soup for soldiers, pauper establishments and hospitals.

To prepare such a soup the bones may be either simply boiled in water under pressure, as in a Papin's digester, or without pressure, or they may be previously freed from salts of calcium by treatment with dilute hydrochloric acid. On the large scale the crushed bones are submitted to the combined action of steam at high pressure and a current of water percolating through the fragments. The bones, preferably in a fresh condition, or preserved by thorough drying or by antiseptic agents, such as brine, are crushed by passing them between solid iron cylinders, grooved longitudinally and kept revolving.

They are then packed into a cylindrical cage, which can be lowered into a cylindrical jacket of rather larger diameter than itself, the whole closing with a close fitting lid. A pipe for the entrance of water, regulated by a stopcock, projects from the top of the outer cylinder and is connected before the lid is put on with an adjustable nozzle through which the water trickles down among the caged bones. Another pipe is connected with the bottom of the apparatus for the passage of high-pressure steam. The gelatin solution may be removed at intervals by means of a stopcock at the bottom. The quantity of water percolating through the bones is carefully regulated in accordance with the varying pressure of the steam, so as to produce a soup of nearly uniform consistence.

STRENGTH OF A GLUED JOINT.

The following contains a great deal of valuable information which will probably be acceptable to many readers.

Common Glue—The absolute strength of a well-glued joint is:

	Lbs. per square ineb.	Across the grain, end to end.	With the grain.
Beech	2.133	1.095	
Elm	1.436	1.124	
Oak	1.735	568	

Whitewood	1.493	341
Maple	1.422	896

It is customary to use from one-sixth to one-tenth of the above values to calculate the resistance which surfaces joined with glue can permanently sustain with safety.

DUMOULIN'S GLUE.

Dumoulin's liquid glue, which possesses powerful adhesive properties, is composed of glue in the proportion of 2 pounds dissolved in 1 quart of water with 7 ounces of nitric acid (sp. gr. 1.335) added. Mouth or lip glue is prepared by adding one-half pound or thereabouts of sugar to each pound of dissolved glue. It forms solid, but easily dissolved cakes, and as it can be sufficiently softened by the tongue, it is for many purposes extremely convenient.

HINTS ABOUT GLUE.

Good glue should be a light brown color, semi-transparent and free from waves and cloudy lines. Glue loses much of its strength by frequent remelting; therefore, glue which is newly made is preferable to that which has been reboiled. The hotter the glue the more force it will exert in keeping the joined parts glued together. In all large and long joints it should be applied immediately after boiling. Apply pressure until it is set or hardened.

THE VALUE OF PIPE-COVERING.

A square foot of uncovered pipe filled with steam at 100 pounds pressure will radiate and dissipate in a year the heat put into 3,716 pounds of steam by the economic combustion of 398 pounds of coal. Thus ten square feet of bare pipe corresponds approximately to the waste of two tons of coal per annum.

NEW PATENTS.

774,811. Air-Refrigerating Device. James C. Witter, New York N. Y. An air tube provided with a longitudinal partition fluted or corrugated in long, gradual, easy curves, said partition having along its edges stiffening ribs, which strengthen it and serve as guides when inserting the partition in the tube.

774,821. Centrifugal Machine. John J. Berrigan, East Orange, N. J., assignor to Francis J. Arend, New York, N. Y., and John Bernstrom, Stockholm, Sweden. A centrifugal machine for the separation of solids and liquids, a rotary vessel and means for producing upon the inner surface thereof and from the solid material a separating chamber for the combined materials subsequently introduced therein.

774,935. Machine for Apply Coloring Matter to Hides. Robert W. Churchill, West Peabody, Mass. A stationary cylinder sector, a perforated cylinder surrounding said sector, means for exhausting the air from said cylinder in order to hold a skin thereon, a coloring applying mechanism arranged adjacent to said cylinder and opposite said cylinder sector for applying coloring matter to a skin at a point where it is held against the cylinder and while it is so held.

775,241. Artificial Fuel. George K. Hollister, Jr., New York, N. Y. An artificial fuel briquet composed of carbon particles, water, clay, resin, muriatic acid, molasses, sulphate of iron and alum and baked until hard and dry.

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HIGHEST HONORS TO THE NATIONAL.

The National Cash Register Company was awarded the highest honors at the Louisiana Purchase Exposition. Two gold medals, two grand prizes, a silver medal and a special honorable mention were adjudged to the company's registers and exhibits by the World's Fair jury of awards. The gold medal for



N. C. R. EXHIBIT AT ST. LOUIS.

cash registers in the division of Liberal Arts was first and most important of the prizes won in the world competition at St. Louis. It set the seal of the greatest of world's fairs on Nationals as the best cash registers ever made. A silver medal for electrically operated registers was also given the National Cash Register exhibit in the division of Electricity—a recognition by the Exposition of a new field opened up by the inventors.

The National Cash Register welfare work for employees was also crowned by the World's Fair authorities with the greenest laurels in their gift. In the division of Education and Social Economy the gold medal for the exhibit showing greatest progress in factory buildings, sanitary working conditions, im-

ture illustrative of welfare work in the National Cash Register auditorium in the Palace of Varied Industries and the showing of welfare features at the main exhibit in the Palace of Liberal Arts were considered by the jury as part of the company's educational exhibit.

The two other coveted honors won by the company's main exhibit were the grand prize and special honorable mention given for the best, most complete and most attractive exhibit in the Palace of Liberal Arts. In every department in which it made a display the National Cash Register was adjudged the highest honors.

BUCKEYE BUILDS MODEL OIL MILL.

The Buckeye Iron and Brass Works, Dayton, Ohio, manufacturers of linseed and cottonseed oil mill machinery, are erecting a 60-ton cottonseed oil mill for the Weleetka Cotton Oil Company, Weleetka, I. T. This will be a model mill in every respect, and will be one to which the manufacturers can point with pride, and one with which the mill people will be more than satisfied. This concern also has just patented and put upon the market a cake breaker that is claimed to be far superior to any other machine in the market, and a machine which will meet a long-felt want.

THE CRANE EXHIBIT AT ST. LOUIS.

One of the most interesting and impressive displays of machinery at the World's Fair was that of the Crane Company, in block No. 26, Machinery Hall. It included practically every article demanded by modern practice

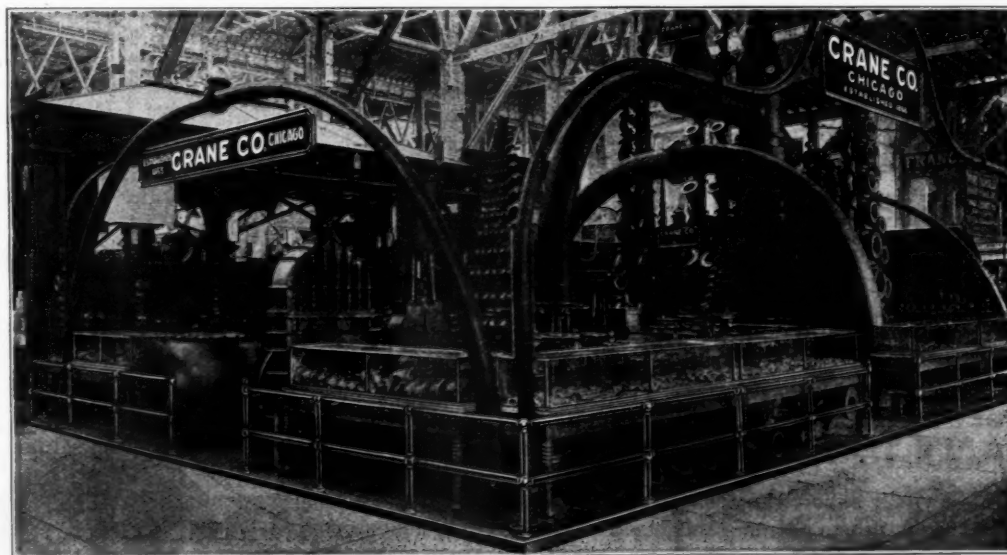
in the steam, gas and water lines, including improved types of pop safety valves, both encased and plain spring, for use on all kinds of stationary boilers; also water and cylinder relief valves for all purposes, all of which are manufactured by this company. Their



PRESIDENT J. H. PATTERSON,
OF THE N. C. R. CO.

display of high pressure goods, pipe bends, flanged joints, valves and fittings, was particularly interesting and instructive, as it was indicative of the great progress in this direction in recent years, as well as of the efforts of this company to be always in a position to supply every requirement of the trade in this direction.

At the Transportation Building the Crane Company had also an exhibit of pop valves and boiler trimmings. This display showed a very full and complete line of pop safety valves, both brass and iron, of special design, in all sizes, for locomotive and marine boilers. Recent improvements in design and construction have made these valves the equal the market.



THE CRANE COMPANY'S GENERAL EXHIBIT AT THE WORLD'S FAIR.

proved dwellings and general efforts for the betterment of housing conditions was awarded to the company. In the same division, the grand prize for general betterment movements and employers' institutions for the benefit of employees was also adjudged to the National Cash Register Company. The lec-

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ICE AND REFRIGERATION

NEW CORPORATIONS.

Gerner Freezer Company, of Vandegrift, Pa., has been chartered in Delaware with \$50,000. Incorporators not named.

Park Falls Creamery Company, of Park Falls, Wis., has been incorporated by Albert Herndobler, J. B. Saunders, E. D. Lyman, D. Donohue, et al., with \$4,000 capital.

Avoca Creamery Company, of Avoca, N. Y., has been formed, with \$3,000 capital, by O. C. Billings, E. P. Clymo and J. E. Olmstead.

Little Creamery Company, of Little, Mo., has been chartered, with \$3,000 capital. The incorporators are W. H. Gray, L. P. Brown, Robert Peterson et al.

Canada Brewing Company, of Jersey City, N. J., has been formed with \$500,000 capital. The incorporators are Alex. F. Garbe, Thos. W. B. Middleton and Richard F. Tully.

Rock Falls Creamery Company, of Price county, Wis., has been chartered, with \$4,000 capital, by ten local parties.

ICE NOTES.

J. T. Ridley's cold storage plant at Greenville, Mich., was burned recently with a loss of \$5,000. Cause unknown. Insurance partial.

The firm of Stevens & Dutcher, of Sterling, Ill., has been dissolved and M. C. Stevens now owns the Crystal Ice Company.

The Tampico Packing Company, of Tampico, Mex., is building a 25-ton ice plant. The company will freeze and can fish.

The Portland (Me.) merchants interested in building a cold storage plant are raising the money and going ahead with the formation of the company.

M. E. Ochs, of Chicago, Ill., is planning to build a cold storage plant at Des Moines, Ia., to cost about \$40,000.

The Philadelphia Ice Manufacturing Company has sold its three-story storage house and plant and its office building on Thirtieth street, near Locust street, to the Knickerbocker Ice Company for \$50,000.

The Diamond Ice Company, of Seattle, Wash., has been granted a compromise franchise for its steam heating and electric lighting systems under streets in that part of the city north of Madison street.

Work is going forward on the ice plant at Beeville, Tex. S. L. Langley, of New Haven,

Conn., and W. T. Baldwin, of San Antonio, Tex., are interested.

The Delaware Water Improvement Company, of New Castle, Del., will put in an ice plant. Artesian well water will be used.

John A. Doe, of the Omaha Distilled Water, Ice and Cold Storage Company, of Omaha, Neb., is visiting New York and Boston to select machinery for the new plant now being built.

Willis H. Michell has been appointed trustee of the Independent Ice Company, of Syracuse, N. Y., succeeding the temporary receiver recently named.

D. Wheeler & Co., an ice company of Schenectady, N. Y., has increased its capital to \$40,000 from \$20,000.

The United Ice Company, of Asbury Park, N. J., will rebuild its ice house on South Main street, which was recently partially destroyed by fire.

The Fauvre Coal Company, of Indianapolis, Ind., which has coal and ice plants in several cities, is planning to put in an ice plant at Pekin, Ill.

The U. S. Horseradish Company at Saginaw, Mich., is contemplating building a cold storage warehouse.

The Washington Ice Company, of Washington, Ind., will put up a brick building 50 by 75 feet and two stories high to contain its new plant.

The creamery of John Kress at Beloit, Wis., was burned recently. Loss, \$4,000.

Louis Ferry, a well-known ice man of Louisville, Ky., was shot accidentally in the face while out with a hunting party recently. His wounds are serious, as his eyes were injured and his nose and cheek badly torn.

The Lincoln Ice Company's new large house at Brown's Lake, Wis., near Racine, is under course of construction.

The Armour Company has just completed a 3,000-ton ice house at Payette, Ida., together with car loading platforms, chutes, etc. The whole cost was \$17,000.

MORRIS POULTRY MANAGER RESIGNS.

C. B. Ford, manager of the poultry department of Nelson Morris & Company, Chicago, has resigned. He will take a long rest before again engaging in business.

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is vitally important—their *pliability*. This suppleness, combined with an extreme toughness of stock, allows the paper to be bent and folded into corners, about pipes, etc., without danger of splitting, tearing or cracking. This characteristic obviates the liability to damage from careless handling. The *pliability* is permanent. Send for samples.

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REFRIGERATION FOR BUILDINGS.

(From Cold Storage and Ice Trade Journal.)

An interesting adaptation of refrigerating work is the air cooling system installed in the Security Trust Company's safe deposit vaults, 43-45 Exchange Place, New York City. The rooms in the basement set aside for the vaults are over and next to the engine and boiler rooms, and consequently the temperature, in summer especially, would be very high if artificial cooling were not employed.

The system as installed is very simple and inexpensive to operate. The machine is placed in the sub-basement about twenty feet from the side where the coils are located. The fan blower is run by an electric motor, and is placed in a small room opening out of the safe deposit vault proper, and just back of the compartment built in the vaults to contain the cooling coils. This compartment or refrigerating bunker is built in one corner of the vault, and might be mistaken for a handsome china or clothes closet. The ducts, which are supplied with openings at proper intervals, are also finished in oak, and the entire installation presents a very handsome appearance and does not mar in any way the harmonious business aspect of the chambers.

In these vaults are stored millions of dollars in bonds and other securities, it being said that a large share of the outstanding United States Government bonds are kept there. The temperature before the installation of the air cooling apparatus ran up to 110° F. on account of the radiation from the boiler and engine room, but it is now easily kept at 75° or 76° F. The above mentioned high temperature, it was feared, would have a deleterious effect upon both the paper and ink of the bonds and securities, besides making it a very uncomfortable place in which to transact business. It will now be possible to keep an even temperature the year around, which adds



Every packer wants the most economical refrigerating machinery and which can be depended upon to produce the maximum of capacity with the minimum of cost, and be the simplest and easiest operated.

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We want every packer who is thinking of installing refrigerating machinery or making any changes to hear our story before he makes any decision. We like to get inquiries and to answer them.

HENRY VOGT MACHINE COMPANY
10th Street and Ormsby Ave. LOUISVILLE, KY.

to the comfort of patrons and attendants, as well as preserving the securities. We will know hereafter that when certain securities, the price of which are daily marked up and down on the nearby Stock Exchange, are said to be put "on ice," the expression will be literally as well as figuratively true.

The plant was installed by the Brunswick Refrigerating Company, whose factory is at New Brunswick, N. J. It is a direct expansion system, and the ammonia expansion coils are placed in the refrigerating bunker or compartment especially built for the purpose. Only one set of coils is required. The refrigeration is obtained as long as the machine is in operation. When the compressor stops the circulation of ammonia ceases.

The notable feature of the "Brunswick" system is the compressor valve, which is a radical departure from the conventional type, so familiar to everybody. The suction valve is carried on the inside of the discharge valve, and has its seat on the inside of the latter. It is possible in this way to make the suction valve of a very large diameter, so as to avoid excessive lift, while the discharge valve is made the full diameter of the cylinder, practically making it a lifting head, so that there is no necessity for providing clearance space, and the piston is set to run a little above the discharge valve seat. When

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Washington, 1227 Pennsylvania Ave., Littlefield, Alvord & Co.
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it reaches a point near the end of the stroke the piston has very little velocity, and comes to rest at the reversing point. As the piston stands above the valve seat at the reversing point, the discharge valve is forced by its spring into contact with the piston and is carried by the piston to its seat, preventing for the most part what engineers call the "slip of the gas." This is really the rushing back of the compressed gas into the cylinder on the suction stroke before the discharge valve closes.

The claim of superiority for this type of valve is based largely on the importance of the pressure to which the gas must be compressed before the discharge valve opens. This is illustrated as follows: If the condenser pressure is 100 pounds and the area of the face of the valve which is exposed to such a pressure when the valve is on its seat is 10 square inches, and the ring forming the valve seat is 3 square inches, then the area of the face of the valve, plus the area of the ring forming the valve seat, equals the area of the back of the valve, which is 10 plus 3, or 13 square inches. Or the condenser pressure of 100 pounds per square inch makes a total pressure of 1,300 pounds holding the valve to its seat. There being 10 square inches exposed to cylinder pressure, the valve will not lift until the gas in the cylinder is compressed to a pressure of 1,300 divided by 10, or 130 pounds per square inch.

From this the conclusion is drawn that with a given width of valve seat and a given condenser pressure, it is simply a question of the ratio of the area of the valve seat to the area of the face of the valve. The greater this ratio the greater the pressure to open a valve against a given condenser pressure. It will therefore be seen that with a small discharge valve this ratio may be very large, but in the type

of valve under consideration the ratio is made as small as possible by making the valve the same diameter as the cylinder. The advantages gained thereby are low pressures in the cylinder, low temperatures of the cylinder walls, a small amount of jacket water, and the possibility of pumping more gas with the same amount of power. This is a fact of great importance in operating a machine. Ordinarily, if a machine is started up without opening the discharge valve a few revolutions will produce a tremendous pressure in the line pipes and cylinders, besides producing a stress on all the reciprocating parts of the machine. But with this valve, before excessive pressures are reached, the whole valve lifts. The spring is made strong enough for all condenser and suction pressures that are liable to be obtained with an ammonia machine.

The difficulty which sometimes occurs of having the suction valve stick is avoided by having the suction valve seat on the face of the discharge valve, the seating of the discharge valve jarring open the suction valve, and this action is accelerated by the momentum of the suction valve produced by its downward movement with the discharge valve and the pressure of the suction gas. The opening of the valve is governed by a nut on the top of the suction valve, and it has been proven that the discharge valve will always lift enough to permit the passage of any foreign matter of any kind which might find its way from the cylinder, although under ordinary conditions the lift of the valve is small on account of its large diameter.

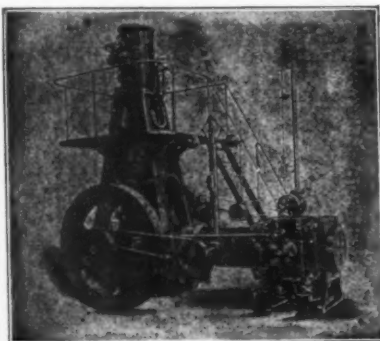
An interesting installation of refrigerating apparatus is at the Kuhn-Loeb Building, Wall and William streets, New York City. It is a ten-ton machine installed by the Railway and Stationary Refrigerating Company, of which Mr. C. C. Palmer is general man-

ager. The purpose of this plant is to cool the air in the banking rooms and the safe deposit vaults in the basement. The plant consists of two motor driven rotary compressors, brine cooler, etc. The brine is cooled and circulated through a bank of pipes inserted in the regular ventilating system of the banking rooms. The air is passed over these pipes before it is taken to the banking rooms. The air is screened and all the moisture is precipitated as it is cooled, so that the air is delivered to the banking rooms. This system is so arranged that while it is used for cooling in warm weather, it can, by a slight change, be used for heating in winter when the air is carried over the coils of pipes which are heated by exhaust steam.

This change can be made at a moment's notice. At times the outside air is sufficiently cool so that no refrigeration is needed, but the machine is ready to be started up at a moment's notice, as has been done on several occasions. The entire apparatus, including the motors, rotary compressors, brine cooler and condenser, are all in a room 8 by 12 feet and about six feet high, and it is shown that this type of apparatus is well adapted for installation in places where the space is very limited.

This company has also fitted up a refrigerator car which is being run on the Erie Railroad, for which it is claimed that it economizes space, has less weight and costs less than it would to use ice in the customary way. The car is being tested by practical operation on the road.

The refrigerating apparatus on this car is driven by belt connection from the axles of the car, which is also a line that is being developed by this company and for which they have several important patents. When the car is not in motion sufficient power is secured from a small oil engine to operate the refrigerating machine, and an oil heater using about a gallon of oil a day keeps the contents of the car from freezing in zero weather.



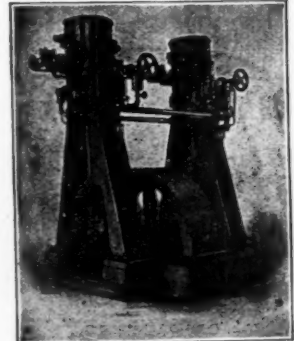
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PROVISIONS AND LARD

WEEKLY REVIEW

All articles under this head are quoted by the bbls., except lard which is quoted by the cwt., in tcs., pork and beef by the bbl., or tierces, and hogs by the cwt.

Hesitating Tendencies Pending Freer Absorption of the Hog Supplies—Statistical Situations and Good Consumption Favor Bullish Movements, But Doubt Because of Large Hog Supplies, That Other Than Tame Situations Will Prevail for the Near Future—Speculations of a Narrow Order.

Unquestionably the hog products markets have some highly favorable features for bullish movements of prices for them yet that it may be doubted that their near future tendencies will be very marked that way; indeed there is a likelihood of some further loss in their prices, and from the influence of hog supplies, which will probably run up to some expectations of a large volume of them at the packing points through December.

The sentiment from the interest of the consumption of the products and the fact that the late steadily increased supplies of hogs fail to enlarge stocks at the packing points of either meats or lard, leads to the conclusion that the market for them will ultimately be taken hold of for firmer tendencies, whatever depression happens for the near future.

There is no question but that the hog products have had enormous distributions to consumers within the last two months, that the stocks of them, which had been steadily

growing in the summer months, have been brought down to the limited quantities that would enable at any time more value for them; moreover, that Europe had to re-supply freely, from influences that had been referred to weeks since in these reviews, particularly in its reduced stocks and the effects upon its home supplies by the summer unfavorable weather conditions. Besides the cautious buying that had been indulged in by our home distributors for a long time before the beginning of the fall trading, has since been of a steady full general order, whereby not only the old accumulations but essentially all of the new packing thus far have been closely taken up.

The distributions of supplies have been, as well, favored by the very satisfactory prices for them to the buyers. Indeed with the cost of hogs, the products have stood in value all along relatively too cheap, by comparison with the ordinary difference in their prices, and there would be permitted stronger prices for them when the influence from the hog supplies is over.

It is, however, quite probable that a less free business would have been accomplished had not prices been arranged upon the indicated favorable basis for consumers; and this deduction is made from the sentiment that has prevailed among buyers that in consideration of the liberal volume of the corn

and cotton crops that there would be an enormous production for the season of meats and fats, and, therefore, that there was a probability of favorable prices to them through the season, whereby there was no necessity in being alarmed concerning buying, except as prices looked reasonable. But it has been shown that by the very liberal consumption that the effect of the expected increased productions is likely to be modified at an early period of the season, except as the spring months may give large supplies of hogs in good condition, as further results from the large corn crop, by which time there may be some reactions from better prices than at present and which seem probable before the spring months are reached.

It now looks as if opportunity would be had for more animation and buoyancy to market conditions after a few weeks more, particularly at the time when the hog supplies should be freely forward, in packer's hands; and that the statistical situation then of the products, by reason of the current good consumption, would seemingly warrant a display of more confidence at that time concerning the hog products prices.

If it has been impossible to make an accumulation of the hog products in the late largely increased packing, it is doubtful if supplies of them by the beginning of the year will be of a large enough order to re-

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strain a sentiment for increased firmness of their trading prices, and especially as there are no signs of, meanwhile, prices being very much against the buying interests.

It is undoubtedly gratifying that the season has worked along thus far, with market prices not only for the hog products but for some associated products, upon a basis permitting the using up of surplus productions, since it admits of a healthier condition of affairs in a more advanced period of the season.

Moreover, the markets for the hog products have had rather lifeless speculative situations as concerns outside buying interest, while they have depended more upon the excellent cash demands.

It would be easy to revive the speculative temper on a turning about of market conditions for the products, and it is altogether likely that there are expectations by prominent interests of much more vitality to speculation after a few weeks more of the current conservative mood, in trading speculatively, and as indulged in at present, by the outside buyers.

The hog products markets even now only sag off a little in price. On Tuesday and Wednesday when the hog supplies at the packing points were liberal, especially on Wednesday, with their prices on the latter day 5@10c. lower, the products prices were eased only a few points because of their small stocks and the consequent rather urgent needs of the packers of the hog supplies. On Thursday there was another full hog supply at the packing points, and still lower prices for the products.

It would be unwise to expect other than tame situations for the products, so long as the hog receipts keep up in liberal volume. Yet that it is believed by the trade that there are prominent leaders emphatically on the "long" side of the market for the long run, and their opinions as backed up by the general statistical situations of the products and the rate of consumption of them.

The allied fat markets with lard have been further depressed for the week. Cotton seed oil has made a new record of easy prices, because of the conservative buying of it by consumers and expectations of a larger than ordinary production, on opinions of the extent of the cotton crop. The compound makers are now talking all sorts of prices for compound lard, ranging from 5½@5½c. for car lots, in their desire to get more life in the buying interest for it, with the competition in selling. And compound lard now looks at very cheap value, even considering the easier cost cotton oil and oleo stearine, which latter is reduced to 6¼c. The tallow markets of the country have been in more secure position than those for any other fat, and because of a less than ordinary production of the tallow and the consumptive demands closely taking it. It is doubtful if a reaction in the London market to a decline of 6d. for the tallow will affect the sentiment of the firmness in this country. Some of the soapmakers here are still needing urgently tallow supplies, as their manufactured goods business is of a brisk order. The fact that cotton seed oil prices are relatively much lower than usual with the cost of tallow, has little influence at present on the tallow market, although cotton seed oil is being increasingly consumed by the soapmakers.

Average weight of hogs last week at Chicago was 233 lbs.; previous week, 229 lbs.;

corresponding week 1903, 227 lbs.; corresponding week, 1902, 222 lbs.

Exports for last week from Atlantic ports, 1,850 bbls. pork; 7,234,910 pounds lard; 12,930,182 pounds meats; corresponding week last year, 3,283 bbls. pork; 12,792,957 lbs. lard; 11,249,341 lbs. meats.

In New York there has been a moderate export trading in pork, with sales of 350 bbls. mess at \$13@13.75; 400 bbls. family at \$14@15.25; 600 bbls. short clear at \$13.75@15.50. Western steam lard has had a moderate export demand, with 750 tes. sold on p.t., quoted at \$7.30. City steam lard has a better export demand, with sales of 400 tes. at \$7; 300 tes. do. at 6¾c. for export. In city meats, there are larger supplies of bellies, with lower prices for them; sales of 65,000 pounds pickled at 7¾@8¼c. for 12 lbs. average; 7¾c.@8c. for 14 lbs. average; 8¼@8½c. for 10 lbs. average, and smokers. Loose pickled shoulders are firm at 7½c sales of 1,800. Loose pickled hams have sold at 9 to 10c. for 6,000 pieces; 40,000 pounds fresh at 8c. for bellies and 8@8¼c. for hams, also sales of 400 tes. No. 1 city lard for export at 6¼c.

BEEF.—Export interest is moderate, but the jobbing trade in barreled is of good volume. Prices generally are quite strong. City extra India mess, tes., \$16.50@17; barrel mess, \$9; packet, \$10.50@11; family, \$11.50

OCEAN FREIGHTS.

	Liverpool.	Glasgow.	Hamburg.
	Per Ton.	Per Ton.	Per 100
Canned meats.....	7 5/8	15/	18c
Oil cake.....	5/	6/3	10c
Bacon.....	7 5/8	15/	18c
Lard, tierces.....	7 5/8	15/	18c
Cheese.....	20/	25/	24c
Butter.....	28	30/	24c
Tallow.....	7 5/8	15/	18c
Beef, per tierce.....	1 5/8	3/	18c
Pork, per bbl.....	1 5/8	2 5/8	18c

EXPORTS OF PROVISIONS

Exports of hog products from Atlantic ports for week ending Nov. 26, 1904, with comparative tables:

	Week Nov. 20, 1904.	Week Nov. 28, 1903.	Nov. 1 to Nov. 26, 1904.
PORK, BARRELS.			
United Kingdom.....	380	1,129	1,884
Continent.....	159	282	1,900
So. and Cen. Am.....	115	558	1,037
West Indies.....	789	1,070	4,024
Br. No. Am. Col.....	387	225	1,717
Other countries.....	20	19	46
Totals.....	1,850	3,283	10,612

	Week Nov. 20, 1904.	Week Nov. 28, 1903.	Nov. 1 to Nov. 26, 1904.
BACON AND HAMS, POUNDS.			
United Kingdom.....	11,158,954	9,451,975	40,852,822
Continent.....	612,600	1,303,016	2,586,044
So. and Cen. Am.....	143,250	218,500	455,687
West Indies.....	97,730	258,550	708,065
Br. No. Am. Col.....	1,050		4,650
Other countries.....	916,378	17,300	948,078
Totals.....	12,930,182	11,249,341	45,655,346

	Week Nov. 20, 1904.	Week Nov. 28, 1903.	Nov. 1 to Nov. 26, 1904.
LARD, POUNDS.			
United Kingdom.....	4,361,010	4,619,730	19,870,629
Continent.....	1,967,000	6,776,792	15,885,504
So. and Cen. Am.....	182,520	740,855	1,297,552
West Indies.....	248,930	584,240	1,788,405
Br. No. Am. Col.....	48,750		92,280
Other countries.....	426,100	71,340	563,480
Totals.....	7,234,910	12,792,957	39,497,850

RECAPITULATION OF WEEK'S EXPORTS.

	Pork, bbls.	Bacon and Hams, lbs.	Lard, lbs.
New York.....	1,613	4,971,175	5,482,570
Boston.....	154	2,964,675	677,093
Portland, Me.....		60,000	135,180
Philadelphia.....		108,000	192,462
Baltimore.....			
Mobile.....			
New Orleans.....	83	74,400	80,550
Montreal.....		4,661,932	404,030
Newport News.....			254,019
Galveston.....			
Totals.....	1,850	12,930,182	7,234,910

COMPARATIVE SUMMARY.

	Nov. 1, 1904, to Nov. 26, 1904.	Nov. 1, 1903, to Nov. 28, 1903.	Decrease.
Pork, pounds.....	2,122,400	2,449,600	327,200
Bacon & hams, lbs.....	45,655,346	47,555,425	1,900,079
Lard, pounds.....	39,497,850	53,373,850	13,876,000

EXPORTS SHOWN BY STEAMERS.

Following were the exports of commodities from New York to foreign ports for the week ending Saturday, November 26, 1904, as shown by Lunham & Moore's statement:

Steamers.	Destination.	Oil Cake.	Cheese.	Bacon.	Butter.	—Beef— Tcs. Bbls.	Pork.	—Lard— Tcs. Pkgs.
1 Lucania, Liverpool.....		331	518	1000				710
Majestic, Liverpool.....		501	967		73		68	1050
2 Victorian, Liverpool.....	2296		4106		210		161	837
New York, Southampton.....		1477						1410
Menominee, London.....	1239	208	100			25	369	4590
7 Cavour, Manchester.....		14						863
Jersey City, Bristol.....	250	5		37			50	9543
Columbia, Glasgow.....		585	15	73		35	395	830
Numidian, Glasgow.....		818		147	50		490	910
Ryndam, Rotterdam.....	12703				36	25	455	4075
4 Hamburg, Hamburg.....			20	35	410	101	175	3467
K. Wil. der Grosse, Bremen.....				75			10	363
Island, Baltic.....		60			60		835	975
Oscar II., Baltic.....	3054				110		380	2150
5 Vaderland, Antwerp.....	8923	232		45		257	360	4250
La Gascogne, Havre.....							150	250
Peninsular, Lisbon & Mad.....					60	50		
6 Algeria, Mediterranean.....					25		225	675
Hohenzollern, Mediterranean.....		31						300
Nord America, Mediterranean.....								50
Prinz Adalbert, Mediterranean.....								310
Total.....	46976	2321	9021	1135	695	751	732	5694
Last week.....	24428	2850	7270	566	1221	250	558	3730
Same time in 1903.....	28831	4965	9261	527	195	860	127	6554
Last year hay 6,231 bales, tallow 834 pkgs., flaxseed 4,200 bu., corn meal 7,120 bbls.								
1.—50 tes. tallow. 2.—300 tes. tallow. 4.—150 bbls. tallow. 5.—50 tes. tallow. 6.—60 tes. tallow. 7.—50 hds. tallow.								

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TALLOW, STEARINE, GREASE and SOAP

WEEKLY REVIEW

TALLOW.—The market in this country continues fairly well supported, however, that the English markets have eased up a little and that there was a decline of 6d. at the London sale on Wednesday, where only 400 to 500 casks were sold out of 1,300 casks offered.

It is more that buying sentiment in this country might be modified on the part of our home consumers if the English markets keep on declining rather than that our markets have depended upon export demand, that the cable news has any significance.

It is a fact that 4½¢. was bid for 200 hhds. city made in New York early in the week and that it was refused, and that despite the weaker London sale it was bid again on Wednesday. Nothing has been done in city hhds. up to this writing.

The soapmakers are freely using tallow, with a full manufactured goods business, and they are not, as a whole, holding their ordinary supplies of it, since some of the soapmakers had been unwilling to pay the late advanced prices for the tallow, and bought supplies of it only as they urgently needed them.

However, there has been enough demand for the tallow supplies to use up the offerings of them. And the feature still prevails of a not as large production of tallow as usual at this time of the year, as the cattle are not yielding as much fat as ordinarily, which feature was, as well, referred to, several weeks since.

It may be said that the surplus supplies of the tallow, outside of investment holdings, which latter are at the West, are for the present of a moderate order, yet if demands should hesitate, that accumulations could soon be made.

There are people with a good deal of confidence in the tallow situation and there are others with a good deal of doubt that the current firm prices have come to stay. The former base their opinions upon the present statistical positions and the fact that consumptive demands have for some time been good, and that they may continue so, together with the exhibit of the modified productions as compared with ordinary seasons.

On the other hand there is suspicion

by some of the soapmakers that some other developments may be soon of an adverse order, and particularly the low cost of cotton oil, which is throwing it much more freely into use of soapmakers rather than grease, which latter product had sympathized in price with late rise in the tallow market.

While it looked early in the week as though a further advance of ½¢. for tallow was imminent, the possibility of it just now is of a slightly slacker order, whatever may be the outcome.

The city hhd. tallow could be had to the extent of about 200 hhds. for next week's delivery, and none of it is, as yet, sold. And this city hhd. tallow has been made relatively scarce by the late consignment of some round lots to England, before referred to. It is doubtful if city, tierces could be had at 4½¢. The city edible tallow is rather scarce, and it is quoted at 5½¢@5¼¢.

Country made tallow has been sold close to the offerings of it here, and at firm prices; sales for the week of 525,000 pounds at 4½¢. to 5¢., and some choice lots even higher.

The Western markets hold to a firm position, but are quieter; prime packers there quoted at 5@5½¢., city renderers at 4½¢@4¼¢.

(Continued on page 42.)

OLEO STEARINE has come down further in price, and some of the pressers are unwilling to force supplies for sale at the decline, because of their sentiment from the firm tallow market. The fact remains, however, that the compound makers have a spiritless business in compound lard, and that they are compelled to force buyers' attention to it by naming lower and competitive prices; therefore that they have no courage for more than ordinary buying of oleo stearine. It would require an aroused pure lard market to get the distributors of the compounds to take hold of them freely, and it would not appear probable that the pure lard market can be started upward until the hog supplies of the country are more freely in packers' hands. Sales of 500,000 pounds in Chicago at a decline to 6¼¢. In New York sale of 50,000 pounds city at 6½¢., but afterwards not more than 6¼¢. could have been made.

LARD STEARINE has little demand;

prices are unsettled; quoted at 8@8¼¢.

OLEO OIL.—There was a little pressure to sell a few days since in Rotterdam, by which 50 florins was accepted for 2,000 tes.; on the depleted stock the market there afterwards, reacted to 53 florins. The New York market is moderately active. Rotterdam quotes 53 florins. New York quotes choice at 9½¢.; prime at 7¼¢.; low grades at 6¢.

COTTONSEED STEARINE has been liberally sold ahead for Europe; there is further demand at 33@34¢. per gallon.

GREASE.—The substantial advance in prices that has been made latterly is well sustained, in sympathy with the tallow market. A good demand prevails, part for export. Yellow at 4¼¢@4½¢.; house at 4¼¢ at 4½¢.; bone at 4@4½¢., and some choice to

To Lard, Grease and Tallow Renderers . .

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Has your lard a proper flavor?

Has your lard a strong odor?

Are you obtaining the full yield from your stock?

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Are you getting from your stock the highest grade you should?

Are you getting dark colored grease or tallow from good high grade stock?

Do you want to obtain white grease from dark stock?

Are you getting all the grease, tallow or lard from your tankage?

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The above are but a few of many problems which daily confront the renderer. Should you have difficulty in any of your operations we will give practical suggestions and advice, gained by many years of experience in the large packinghouses in this country.

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4½@4½c.; "B" white at 4½@5c.; "A" white at 5½@5½c.

GREASE STEARINE—Is quite scarce at the late higher prices. Yellow quoted at 4½c.; white at 5¼c.

COCOANUT OIL—Is in very strong position and may be quoted ¼c. higher for the week. The advance is easily brought about by the increased consumption for edible purposes and which is likely to continue through January and February, and which takes just so much more of the supply away from the soapmakers. Besides the copra supplies of the world are less than ordinarily. Ceylon is practically 6¼@6½c. in all positions. Ceylon spot, 7@7½c.; do. December arrival, at 6½c.; November to January shipments, at 6½@6¾c. Cochin, spot, 7½c.; do. December shipments, 7¼c.; December arrivals, 7½c.

PALM OIL—Trading is limited to small lots; but because of the moderate stocks prices are firm. Red, commercial, at 5½c.; Lagos, at 6c.

LARD OIL—There is a moderate amount of trading in job lots, with prime quoted at 61@62c.

CORN OIL—Exporters do not care to pay over \$3.40, yet car lots are hard to obtain under \$3.50, and job lots range from \$3.65 to \$3.80.

NEATSFOOT OIL—Demands are increasing, chiefly for 40 list and prime. 20 cold test at 97c.; 30 do., at 86c.; 40 do., at 62c.; prime at 49c.; dark at 42c.

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PRODUCE EXCHANGE NOTES.

Two memberships were sold at auction at \$400 and \$380.

Proposed for membership: Edward P. White, Charles C. Gorsuch, Guy Hamilton, Richard Noecker, Henry G. Weil.

Visitors: E. Zeidler, Amsterdam; W. H. Ayres, London; J. O. Hunt, London; E. F. Smith, Paris; W. Kulinkampff, Bremen; Martin M. Schultz, E. A. Valentine, Chicago; J. M. MacDonald, Cincinnati; C. F. Allen, St. Louis.

MACDONALD IN NEW YORK.

J. M. MacDonald, with Procter & Gamble, Cincinnati, was a visitor at the New York Produce Exchange through the week.

NEW WAY OF DRILLING SALT.

Hand power has been replaced by an auger worked by compressed air in the big salt stores of Muskegon, Mich. Salt, on account of its affinity for water, is a substance that has a tendency to harden and cake when piled away any length of time, and some of the cellars where it is stored contain beds of it twenty feet high and so hard that but little impression can be made upon them even with the pick or axe.

For this reason a somewhat curious device has been brought into use to loosen the material so that it can readily be secured. This is a large boring tool or auger which is operated by compressed air. The auger is mounted on a wheeled truck, which is guided by handles projecting from the rear of the framework. The rear end of the auger revolves in a socket fitted into the framework, while the air is admitted to the socket from the hose which supplies it.

When operated, the boring tool is pushed against the mass of salt and the auger is set in motion, and in a minute or two, so rapidly does the tool work, a hole about five inches in diameter is made in the formation the entire length of the auger. Then another hole is drilled parallel with the first and another until the pile has been undermined, so to

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speak, when its contents can easily be broken out. The advantage of this method is seen when it is stated that two men can get out as much salt by the power method as two dozen by using picks and shovels.

ROBERTS DIES AT LOS ANGELES.

William E. Roberts, manager of the Cudahy plant at Los Angeles, Cal., died in that city last week of a complication of diseases. He was a veteran packinghouse man and well known in the trade. He entered the employ of P. D. Armour in 1885 and was the Armour representative at Providence, R. I., and Minneapolis before he went with Cudahy. He had been in charge at Los Angeles for the past six years.

BANES LEAVES ARMOUR.

C. E. Banes, manager for Armour & Company at Davenport, Ia., has resigned to go into business for himself at Rock Island, Ill.

See page 48 for bargains in equipment.

COTTONSEED OIL

WEEKLY REVIEW

THE NATIONAL PROVISIONER is an official organ of the Interstate Cottonseed Crushers' Association, and the official organ of the Oil Mill Superintendents' Association of the United States.

Sick Markets Everywhere—Extensive Unloading and Going "Short" in New York—Liberal Offerings of Crude by the Mills at Lower Prices—Production Liberal.

While the decline in prices has been through the week of a fractional order, it has been attended with a feeling of depression and more uniform opinions of still lower prices, and which have made an active market in New York in spilling our "long" holdings as well as in the prompting a disposition on the part of all of the producing interests to sell as freely as possible, while where buying has been done it has been more to cover contracts, yet some speculative trading otherwise.

It is that sort of market in which some speculators may get a little courage some one day upon a small decline in prices and thus chance a few investments, only to throw their holdings upon the market the next day at a less price, and as under the almost steady threatening look of the large productions and the conservative conditions of the trading in the consuming channels and particularly as the markets go down in this country the greater the determination on the part of Europe to "see it out," with the consequent very limited trading on European account.

The market in New York is now rather more than 1 cent per gallon lower than the inside price a few weeks since, when Europe was buying, but it is practically 2 cents lower than the prices that had been established after the former decline.

The only foreign demand latterly for the cotton oil had been from the olive oil countries, and this was more for winter yellow, while, just now, all sources of foreign demand are of decidedly apathetic order, and notwithstanding the hope that had been held from the prices of olive oil in Europe, which had recently been advanced, of more interest in the cotton oil offerings from this country.

The depression in this country for the cotton oil is too much for the European buyer for a feeling of security in a trading basis and he wants developments for the "bottom" of it.

There is little question but, at this writing, of great expectations concerning the cotton crop, and that the Government report tomorrow (Saturday), which will estimate the

yield and perhaps show the per cent. of the cotton ginned, it is expected by a larger portion of the cotton trade will bear out ideas of an exceptionally large cotton yield. And there people evidently have the upper hand of the cotton market, for the present, whatever may develop concerning the cotton crop.

The ginners' report brought out on Wednesday gave a showing of 9,906,057 running bales ginned to Nov. 14, or 9,786,646 commercial bales. There is no question but that there is a liberal quantity of cotton yet to be ginned in the Southeast sections, although we think that the per cent. of the cotton ginned elsewhere is much larger than in most seasons, up to this time, and particularly so in Texas and the Territories, Louisiana, Mississippi and Arkansas; therefore that ginners' reports, just now, by comparison with those of previous years, are not pointing out satisfactorily the extent of the cotton crop, but that the next ginners' report, which will be made Dec. 13, will admit of comparisons by which ideas of the extent of the cotton crop will be of a more secure order. Extensive trade estimates of the cotton crop had turned to modifications of them until the ginners' report was received, and they are now being adopted again, but there is more irregularity of opinion still as to the size of the cotton crop than ordinarily at this time of the year, and the estimate of the Government tomorrow concerning it may leave the trade as much bewildered as it is at present.

The cotton crop, however, is undoubtedly a decidedly large one, whatever the limit of the figures for it, yet to be determined.

It is clear that the cotton oil market is affected by the prospects of the cotton crop and the cotton oil production, and that the depression as to prices pervades the Southern markets, as well as those outside of it. By the disposition on the part of the South to sell this week some of their holdings of the refined oil in the New York market and its unloading, as well, of crude oil, the opinion South, as well as North, of a large cotton crop is emphasized.

There are considerable December deliveries of the cotton oil to be made on contracts in New York, and this may further disturb market conditions.

The prices of the crude oil at the mills have been affected in some degree to weakness, as outside of the other enumerated in-

fluences, by the fact that there had been too much of it held right along through the producing period, in hopes that had been held of better market conditions for it and that more tank capacity is needed, whereby there is some necessary unloading of holdings. Nevertheless there have been some free sellers of the crude oil, more particularly by the large companies, since the beginning of the season, and some of these people continue to offer large lines of crude at steadily yielding prices for it, and chiefly because of the liberal productions and the prospective conditions of the market, and particularly as it is hard to get any of the other large consuming interests to take the surplus oil off their hands. It may be said, however, that there are some large sales of crude oil to some of the companies at the lower prices, but which immediately sell refined oil against their buying of the crude and in consideration of the depressed look of affairs.

The call for margins this week on some of the speculative holdings of the refined oil in New York has tended to throwing over a good deal of the refined oil, and has, of course, given added weakness to the situation.

The fact that there has been, for some weeks, very large sales in New York of the refined oil to speculators in it for all of the deliveries up to May would, of course, make the market outlook more uncertain unless there should set in a reaction from the present depression to the market, since these speculators, most of them, would not want the oil delivered to them as the months go by, and some of them would not care to respond much beyond a certain limit on margin calling; therefore the result would necessarily be unloading in a degree that demands would not respond to except at easier prices.

The declining oil market and the abundant cotton crop have brought the prices of seed down latterly about \$1 per ton and the prevailing prices are for it; \$13@14 in the Southeast, \$13 in the Valley, \$12 in Louisiana and \$11 in Texas.

The mills are getting seed supplies rather freely, on the whole, although there are spasmodic interruptions to a liberal marketing of it.

If it turns out that the cotton crop will reach some extreme estimates of its yield, there would be every probability of the sea-

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son's cotton oil production being even larger than some late views concerning it. But we hold to the opinion that while this cotton crop is a decidedly large one, it has been somewhat overestimated by some of the late outside figures of the yield put upon it, although that it may not be clearly shown so until the season winds up.

There is no doubt, however, in our opinion, of an oil production to the large extent referred to in our former reviews and which we referred to as the most important yet had; therefore that a more than ordinary season's home consumption and a larger than ordinary export business are both needed.

There is absence of export interest in the oil, just now, from the soapmaking sources of Europe; nevertheless there are probabilities of a more than usual trading with Europe when it is convinced that the markets in this country are right for buying. Indeed we think that a large export business for the season must be had if the larger productions are to be taken up, and this would imply that prices would have to be put right for the foreign markets, especially in consideration of the fact that European markets have plenty of linseed and cheap prices for it, and possibilities of fair supplies of some other soap oils to compete with the use of cotton oil.

The fact that the lower prices for cotton oil fail to attract home consuming interests in buying ahead of near needs is not astonishing when it is considered that all of the future deliveries of the oil are at higher prices than the near deliveries, although that these consumers would probably buy the future deliveries if they could get them as cheap as, say, the December delivery. Yet that the compound makers, particularly, do not have more than a moderate business in the compound lard, although that they have reduced the prices for it to $5\frac{1}{4}$ @ $5\frac{1}{2}$ c. in efforts to sell it more freely, and which makes a narrower than ordinarily margin of profit, despite the fact that the price of oleo stearine has come down to $6\frac{1}{4}$ c. and that bleaching grade of the oil, in tanks, could be had in Chicago at $24\frac{1}{2}$ c.

The consumption of the cotton oil by the home soapmakers is increasing because of the cost of greases and tallow, but these soapmakers refrain, as well, from buying ahead. The cotton oil market, therefore, misses the backing that would come about in most seasons in contracting for oil supplies for future deliveries; while that this conservative mood in buying is hardly likely to be dismissed until the consumers feel that full effects have been had from the cotton crop and large oil production.

In the sales for the week, however, have been about 4,000 barrels of the cotton oil to the local and Western soapmakers.

The markets with which cottonseed oil must at times derive support or weakness, whatever may happen to it immediately from more direct features, have for the week had the following exhibits: That the pure lard market has most of the time been of a tame order because of the large receipts of hogs, that although the stock of the lard is a small one, by reason of a liberal consumption of it here and in Europe, that it is doubtful if it will show permanently higher prices until the rush of hog supplies is over. After a few weeks we expect to see a bullish lard market, indeed that it could come even now if the small stock of lard only was to be considered. We think that consumption of essentially everything in the food line, except of cotton oil, is well alongside of productions, and that after the immediate, referred to, influences are over as factors, that there is a good prospect of recoveries in tones of general markets, except that for tallow, which product has been strained a little too strong prices latterly and may, as supplies become larger of it, show reactions to easier market conditions.

The cottonseed meal has some demand for export, but it is at lower prices and about \$1 per ton under sellers' views as concerning the offerings at the South, where the home consumers are rather freely buying at \$21 per short ton at the mills.

There have been offers to sell winter yellow in New York at 31c. and at $30\frac{1}{2}$ c. for near

delivery, and offers to sell it for July, August and September at $31\frac{1}{2}$ c. and a very slow market. White and butter oils have been offered for near delivery, both at $29\frac{1}{2}$ @ 30 c.

The mills have sold those in the Southeast fully 125 tanks crude again this week at $19\frac{1}{2}$ c., and they offer it at $19\frac{1}{2}$ c., with bids scarce over 19c. The Valley has sold 45 tanks crude at 19 @ $19\frac{1}{2}$ c., and Texas 60 tanks at $18\frac{1}{2}$ c., closing 18c. bid and $18\frac{1}{2}$ c. asked and 19c. bid and $19\frac{1}{2}$ c. asked in the Valley. At this writing crude in the Southeast has further declined $\frac{1}{2}$ c., as it is offered at 19c.

The New York market has shown prices on the respective days of the week as follows: At the close of the previous week, sales of 100 bbls. prime yellow, December, 26c.; 400 bbls. do., January, $26\frac{1}{2}$ @ $26\frac{3}{4}$ c.; 400 bbls., February, 27c.; 600 bbls., March, $27\frac{1}{2}$ c.; 200 bbls., May, $28\frac{1}{4}$ c.; 4,500 bbls., do., 28c.; prices then: November, $25\frac{3}{4}$ @ $26\frac{1}{4}$ c.; December, $25\frac{3}{4}$ @ $26\frac{1}{4}$ c.; January, $26\frac{1}{2}$ @ 27 c.; February, 27 @ $27\frac{1}{4}$ c.; March, $27\frac{1}{4}$ @ $27\frac{3}{4}$ c.; May, 28 @ $28\frac{1}{4}$ c.

On Monday $\frac{1}{4}$ @ $\frac{1}{2}$ c. lower; sales, 900 bbls. prime yellow; December, 26c.; 100 bbls., March, 27c.; 200 bbls., May, $28\frac{1}{4}$ c.; 3,000 bbls., do., 28c.; prices then: Early in the day, November, $25\frac{3}{4}$ @ $26\frac{1}{4}$ c.; December 26@ $26\frac{1}{4}$ c.; January, $26\frac{1}{2}$ @ 27 c.; February, $26\frac{3}{4}$ @ $27\frac{1}{4}$ c.; March, $27\frac{1}{4}$ @ $27\frac{3}{4}$ c.; May, 28 @ $28\frac{1}{4}$ c.; and at the close, November, $25\frac{1}{2}$ @ $26\frac{1}{4}$ c.; December, $25\frac{3}{4}$ @ 26 c.; January, $26\frac{1}{4}$ @ $26\frac{1}{2}$ c.; February, $26\frac{3}{4}$ @ 27 c.; March, $27\frac{1}{4}$ @ $27\frac{3}{4}$ c.; May, $27\frac{3}{4}$ @ 28 c.

On Tuesday steadier; sales, 100 bbls. prime yellow, May, $27\frac{1}{2}$ c.; 100 bbls., do., $27\frac{3}{4}$ c.; 100 bbls., last half, December, 26c.; 2,500 bbls., May, $27\frac{3}{4}$ c.; prices early in the day: December, $25\frac{1}{2}$ @ 26 c.; January, $26\frac{1}{4}$ @ $26\frac{1}{2}$ c.; February, $26\frac{1}{2}$ @ 27 c.; March, 27 @ $27\frac{1}{4}$ c.; May, $27\frac{3}{4}$ @ 28 c.; and late: December, $25\frac{3}{4}$ @ 26 c.; January, $26\frac{1}{4}$ @ $26\frac{1}{2}$ c.; February, $26\frac{3}{4}$ @ 27 c.; March, 27 @ $27\frac{1}{4}$ c.; May, $27\frac{3}{4}$ @ 28 c.; afterward at $27\frac{1}{2}$ c. bid and $27\frac{3}{4}$ c. asked.

On Wednesday there was a good deal of unloading early in the day at easier, in instances, prices. Sales of 1,200 bbls. prime

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COMPOUND LARD

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COMPOUND LARD.

DALLAS, TEXAS.

yellow, December, 25½¢; 1,200 bbls., January, 26¼¢; 1,600 bbls., March, 27¢; 1,100 bbls., April, 27¢, and 4,400 bbls., May, 27½¢; prices then: December, 25½¢@25¾¢; January, 26¢@26½¢; February, 26½¢@27¢; March, 26¾¢@27¢; May, 27½¢@27¾¢, and late in the day there were fully 5,300 bbls. prime yellow, May, traded in at 27½¢; 300 bbls., do., January, 26¼¢; 200 bbls. do., February, 26½¢; prices: December, 25½¢@25¾¢; January, 26¢@26½¢; February, 26½¢@27¢; March, 26¾¢@27¢; May, 27½¢@27¾¢. On Thursday early in the day the near months were lower; there were, however, 1,400 bbls. prime yellow, May, sold at 27¼¢, and 600 bbls. do., January, at 26¢; prices then: December, 25¼¢@25½¢; January, 25½¢@26¢; February, 26¢@26½¢; March, 26½¢@27¢; May, 27¼¢@27½¢. The close showed sales 100 bbls., December, 25½¢; 100 bbls., January, 25¾¢; 1,000 bbls., May, 27¼¢, and afterwards fully 5,750 bbls., May, bought at 27½¢, and prices as follows: December, 25¼¢@25½¢; January, 25½¢@26¢; February, 26¢@26½¢; March, 26½¢@27¢; May, 27¼¢@27½¢, closing at 27½¢.

(Friday's market will be found on page 42.)

COTTONSEED OIL SITUATION.

(Special Letter to The National Provisioner from Aspegren & Co.)

New York, Dec. 1.—The government ginning report seems to confirm the idea that the crop this year is an unusually large one, and reports from all over the country indicate that seed receipts this year so far are almost twice as large as last year this time. That this means a very heavy crush and a large supply of oil, at least for the time being, is clear. The enormous lots of oil thrown on the market in New York for all deliveries from December to May show well enough that there is plenty of oil for sale. Ten thousand barrels of oil sold daily on the Exchange is no unusual thing at present. For every barrel of oil that is offered there seems to be a buyer; however, it is natural that with so much offered, the buyers will try to take advantage of the good position in which they are and get the oil in just as cheap as possible. Offerings are certainly large, but, on the other hand, the demand is also very heavy. For the time being, how-

ever, the supply seems to be somewhat ahead of the demand and a decline for the week of 1c. is the proof of it.

The most interesting question, however, is what the future is going to bring about. As long as seed receipts continue as large as they are at present, and as long as the mills are as free sellers as they are now, buyers will take advantage of the same by steadily reducing their limits, in the meantime buying all that is offered. Should, however, the seed receipts fall off, it will be an entirely different matter, and no doubt the buyers then would be glad to get hold of all they can at prevailing low prices. For the moment, however, there is nothing in sight to indicate any falling off, but, of course, things may change at any moment. It is a very interesting situation and well worth watching.

Closing prices at noon to-day were as follows: Prime summer yellow cottonseed oil, December, 25½¢. asked and 25¼¢. bid; February, 26½¢. asked and 26¼¢. bid; January, 26¢. sales; March, 27¢. asked and 26½¢. bid; May, 27¼¢. sales.

We further quote: Prime winter yellow cottonseed oil, 30¢; prime summer white cottonseed oil, 29½¢; Hull quotation of cottonseed oil, 16s. 3d.; prime crude oil, in tanks, in Southeast, December, 19@19½¢; January, 19½¢; February, 20¢; March, 20½¢.

CABLE MARKETS.

Hamburg.

(By Cable to The National Provisioner.)

Hamburg, Dec. 2.—Cottonseed oil declining rapidly; buyers holding off. Sales of good grades of oil at 33½ marks, c. i. f. Quote prime summer yellow 35½ marks; butter oil at 37½ marks.

Rotterdam.

(By Cable to The National Provisioner.)

Rotterdam, Dec. 2.—Cottonseed oil active on the decline, with large transactions; buyers now generally out of it. Sales of prime summer yellow at 20½ florins. Butter oil quoted at 22½ florins.

Marseilles.

(By Cable to The National Provisioner.)

Marseilles, Dec. 2.—Cottonseed oil market very weak and depressed in consequence of heavy offerings. Sales for prompt delivery of prime summer yellow at 42½ francs and later deliveries at 41½ francs. Prime winter yellow sales at 49@50 francs.

Trieste.

(By Cable to The National Provisioner.)

Trieste, Dec. 2.—Cottonseed oil dull and declining. Buyers generally are well filled up. Small sales of prime summer yellow at 43 francs for January to March deliveries. Winter oil in fair demand at 49½ francs.

Liverpool.

(By Cable to The National Provisioner.)

Liverpool, Dec. 2.—Cottonseed oil—some business done in prime summer yellow at 16s. 9d. c. i. f. Off oil in fair demand at 16s. 4½d.

COTTONSEED OIL EXPORTS

Exports of cottonseed oil for the week ending December 1 and since September 1 were:

From New York.

Port.	For Week.	Since Sept. 1.
	Bbls.	Bbls.
Acapulco	—	25
Adelaide	—	53
Alexandria	—	920
Algiers	—	2,005
Ancona	—	175
Antigua	—	76
Antwerp	256	731
Auckland	—	35
Barbados	—	140
Batavia	—	100
Bombay	—	300
Buenos Ayres	—	550
Calcutta	—	67
Canton	—	10
Cebu	—	10
Cardiff	—	125
Cape Town	—	10
Changhai	—	51
Christiansburg	100	201
Christiansand	—	25
Colon	15	141
Conakry	—	15
Copenhagen	100	1,225
Corinto	68	96
Dantzig	—	1,300
Delagoa Bay	—	21
Demerara	—	288
Dublin	—	76
Dundee	—	5,308
Dunkirk	—	206
East London	—	115
Fort de France	—	569
Fredericktown	—	38
Gaillard	—	450
Genoa	882	11,042
Georgetown	20	94
Gibraltar	50	200
Glasgow	—	200
Gothenburg	167	746
Guadaloupe	—	494
Hamburg	215	1,872
Havana	36	435
Havre	1,406	7,892
Hong Kong	—	54
Hull	—	175
Kingston	49	758
Kobe	—	500
Konigsberg	100	489
La Guaira	—	1,459
Leghorn	425	1,142
Liverpool	25	445
London	90	602
Macoris	332	—
Malmo	—	6
Malta	—	658
Manchester	100	210

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Marselles	3,138
Martinique	214
Massowah	—
Matanzas	—
Melbourne	88
Montego Bay	58
Montevideo	55
Naples	259
Oran	—
Port au Prince	15
Port Limon	—
Port Natal	—
Porto Cabello	—
Port of Spain	—
Port Said	118
Rio Janeiro	—
Rotterdam	100
St. Kitts	31
St. Thomas	—
Santiago	—
Santos	—
Sierra Leone	—
Singapore	57
Southampton	—
Stavanger	30
Stettin	600
Stockholm	75
Sydney	—
Trieste	—
Trinidad	—
Tunis	—
Valparaiso	213
Velle	—
Venice	—
Vera Cruz	—
Totals	9,846

From New Orleans.

Antwerp	—
Belfast	—
Bremen	—
Copenhagen	—
Genoa	—
Glasgow	622
Hamburg	—
Havana	161
Havre	—
Liverpool	—
London	—
Marselles	—
Rotterdam	—
Trieste	—
Total	783

From Galveston.

Antwerp	—
Hamburg	—
Rotterdam	—
Trieste	—
Vera Cruz	—
Total	17,368

From Baltimore.

Antwerp	—
Bremerhaven	—
Copenhagen	605
Hamburg	—
Rotterdam	—
Stettin	—
Total	605

From Newport News.

Hamburg	—
Liverpool	—
London	42
Rotterdam	—
Total	42

Recapitulation.

From New York	9,846
From New Orleans	783
From Galveston	17,368
From Baltimore	605
From Newport News	42
Grand total, all ports	11,276

SOUTHERN MARKETS

Kansas City.

(Special Wire to The National Provisioner.)

Kansas City, Dec. 1.—Cotton oil quiet; buyers' views reduced, but mills are unwilling to make concessions. Prime crude, eighteen to eighteen and a half; Texas and territories bid prime summer yellow at twenty-one; Texas basis asked, twenty freely bid and declined.

New Orleans.

(Special Wire to The National Provisioner.)

New Orleans, La., Dec. 1.—Crude is decidedly weaker at eighteen and a half, Texas; nineteen, Valley; one-half less generally bid; almost no demand for refined. Cake and meal are firmer at twenty-five, and one-quarter to three-eighths, long ton, shipside at New Orleans, first half December; good inquiry. Hulls are in fair demand at four dollars per ton loose; five fifty, sacked, delivered here.

Dallas.

(Special Wire to The National Provisioner.)

Dallas, Tex., Dec. 1.—Oil market easy, eighteen bid with fairly good sales the past few days at eighteen and one-half for prime crude; twenty-one for prime summer yellow. Other products same as last week.

PRESERVED EGGS.

The chief chemist of the United States Department of Agriculture claims that Chinese eggs are "adulterated," because they are preserved with borax for export to foreign countries. Chinese gather up their broken eggs, preserve them for export and ship them to this country. Evaporated eggs and canned eggs are a product of this country.

The practice of conserving this kind of food is a European one. So many eggs are broken in shipment that the cold storage warehouse found this a great source of loss to the shipper or to the merchant storing them. They were also a nuisance. There are times, too, when, in calendering eggs, it is found that the life of a broken egg after treatment is longer than that of the same egg in the shell, so the thing is broken at that stage and put up for cooking purposes.

It is better than flooding the market with the stale or rotten product later on. Just where the line may be drawn between very stale eggs in the shell or the so-called "doctored" or treated egg in the fresher state is hard to state; the latter product is healthier than the added egg which is unbroken. An

added egg does not improve with cooking, even if its mixed state is covered by being scrambled or hidden in the doubtful hue of a cake.

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HIDES AND SKINS.

(Daily Hide and Leather Market.)

Chicago.

PACKER HIDES.—The market continues strong on branded hides and the good sales that have been made of these at advanced prices have steadied the market on native steers. One prominent packer has ceased offering any more hides for this week and claims that the cattle that are now coming in are mostly canners. The total sales of packer hides on Tuesday and Wednesday, most of which have been previously reported, amounted to over 50,000 and were mostly taken by large operators. Three of the packers have together sold 12 cars of native steers at 14c., and the price on this variety is steady at that figure. Packers want 15c. to sell spready native steers ahead to January 1. The advance noted yesterday in Texas hides is fully established, and one large packer has sold a block of Texas from all points, mostly ahead, estimated at 5,000, at 13¼c. for heavy, 12¾c. for light and 11¼c. for extremes. Another extensive packer has sold two cars of butt brands at 12¼c., but no further sales of Colorados have been made since those noted yesterday. Colorados continue firm, however, at 12c. The large sales of branded cows at 11½c. have cleaned up holdings of most packers well into December. Heavy native cows are established at 12¼c., and further sales are being made at this figure, including two cars from Kansas City by a prominent packer. Light native cows are firm at 12c., with three different packers offering to sell at this price. Native bulls are strong at 10¼c., with some packers asking 10½c. to sell ahead. Few branded bulls are being offered at 9¼c.

COUNTRY HIDES.—Buyers continue to talk a weaker market on buffs, but no sales have as yet been reported by any of the Chicago dealers at under 10¾c. and 9¾c. One tanner, however, has made some further purchases from outside points of buffs at 10½c. and 9½c. delivered at the tannery. The fact that tanners are not willing to pay 10¾c. and 9¾c. for buffs here is making a dull market for them. Michigan hide dealers are predicting that lighter cattle will be slaughtered than last year, and that there will be a decreased kill. Heavy cows are quiet but continue steady in price at 10¾c. and 9¾c. Extremes are firm 11c. and 10c. with some dealers holding at ¼c. at above these prices. Good lots of heavy steers are quotable at 11¾c. to 12c. selected, although for some lots it is difficult to secure the inside figure. Last sales of bulls were at

9c. and 8c., but dealers having car lots of these are mostly holding at 9¼c. and 8¼c.

CALFSKINS.—The market continues unchanged, although buyers are talking considerably below dealers' views and point to the slight declines that have occurred in the Paris market. Chicago city skins are held nominally at 15c., but there are no bids for these at over 14½c. Choice outside cities are quotable at 14½c. to 14¾c., and countries range from 14 to 14¼c., with some choice lots held at 14½c. Last sales of fall kip were at 12¾c., and some present receipt kip are being offered at 12¼c.

SHEEPSKINS.—The market continues sold ahead on packer pelts, and no further transactions have been made. Last sales of prime heavy packer sheep were at \$1.75 and best run of lambs at \$1.65. Lighter average stock, however, has sold under these figures, and the market is considered quotable at \$1.60 to \$1.75 for packer sheep and \$1.40 to \$1.65 for packer lambs. The cleaning up of the packer market had the effect of stiffening prices in the country still further, and some sales of heavy average fresh butcher skins are reported sold as high as \$1.50. Bridgeport skins are bringing an average price of \$1.20 to \$1.30. Fresh butcher country stock is quoted at a range of \$1.25 to \$1.50, and inferior stock at \$1 to \$1.20.

New York.

DRY HIDES.—No further sales have been made but the market is strong and stocks light.

CITY SLAUGHTER HIDES.—One local packer has sold his spready native steers of November and December take off to January 1st, estimated about 2,000 at 14¼c. A car of native steers of outside kill has been sold at 13½c., and another outside packer sold a car, presumably at the same price. No sales of regular packer native steers are reported.

COUNTRY HIDES AND CALFSKINS.—The market on hides is weaker here, as a car of New York State cows has been sold at 10c. flat for delivery within a fortnight. Some smaller lots of mixed hides have been sold at this price, but most are holding car lots of cows alone at ¼ to ½c. more. The exciting feature of the market has been a material advance in the price per pound to butchers of New York City calfskins. One concern advanced calf prices 2c. per pound to 18 and 16c. for No. 1 and No. 2, and 20c. apiece advance on kip. Another collector later raised the price 2c. per pound more on calf to 20c. and 18c., and kips 5c. apiece

more. Prices on skins, outside of New York, however, have not been advanced.

Paris Auctions.

Paris, Dec. 1.—Results of the auctions are as follows:

	Advance.
Extra heavy steers.....	0.49%
Medium steers.....	3.48%
Heavy cows.....	1.00%
Bulls	0.67%
	Decline.
Light cows.....	0.24%
Extremes, over 26 lbs.....	3.16%
Veal, kip, 15 to 26 lbs.....	2.83%
Calfskins, under 15½ lbs.....	1.71%
Heavy steers were unchanged.	

Leather Conditions.

The market on sole leather is not quite as active as it has been, but the situation all around is as strong as ever. New York leather jobbers report that their business during November showed one of the duller months that they have ever experienced. Choice tannages of light union backs are being held at 36c., but no sales have as yet been made at over 35c. Local tanners continue to hold tannery run Texas oak sides at 27½c., but have not as yet sold at over 27c. Offal is very strong and active, and as closely cleaned up as ever. Belting butts range in price from 37 to 40c. for light weights, according to tannage and heavy butts sell all the way from 35 to 39c. Scoured oak backs are strong at 36c., with some tannages held at 37 to 38c.

CATTLE RAISING IN ALASKA.

"It is high time for the East to abandon the notion that Alaska is a region of eternal frost," said a man recently who is in a position to know. "In the southeastern part and on the peninsula the winters are not more rigorous than in New York. The climate is so mild in the summer that a new industry hitherto suitable and profitable only in warm countries has been started. Cattle raising will begin this summer on the peninsula, and during my stay there large areas were stocked with sheep as a step toward developing the industry. In the summer the grass is high enough to hide a six-foot man."

**SEE THE LIST OF
BARGAINS
ON PAGE 48**

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CHICAGO SECTION



Pete Hamler has ordered a new 1½ buggy.
—Posey County Times.

Young Corbett got it where the turkey got it just before Thanksgiving. Such is fame.

Top beeves for the week ending Nov. 26 brought \$7.15; same week year ago, \$5.75; two years ago, \$7.75.

Swift & Co.'s sales of fresh beef in Chicago for week ending Nov. 26 were reported to have averaged 5½c. per lb.

Why don't "Cap" Streeter put his case in the hands of "Doc" Dowie, past master in the art of realizing on any old kind of assets?

Judge Tuley has granted an injunction against Chas. E. Grasse, the Stock Yards money lender, protecting several stock yards salaried employees.

The butchers are not going to strike. That story was just a josh. Any one who has tried sand-pies all summer is not going to tackle wind pudding in the winter.

Jim Poole says hogs are bumping down around the bottom and he thinks there is a good "look in" for better figures ere long. And Jim is not a bad guesser by any means.

Mr. Garfield should hurry up his visit or may be most of the packers and others will be away on vacation if this weather continues. It is to be hoped he will not overlook that "one-man trust," Harry Seiter.

Shipments of meats from Chicago last week included about 217,000 hams, 77,000 shoulders and 148,000 sides. For the corresponding time last year the shipments were about 167,000 hams, 72,000 shoulders and 218,000 sides.

Vice-President Joseph, of the Schwarzschild & Sulzberger Company, was a visitor in Chicago during the week—looking for an advance in beef, it is reported. Joseph is a hustler and they all stir their stumps when they see him coming.

The International Livestock Exposition next year will boast an immense modern coliseum. President Spoor's plan and proposition having met with the heartiest kind of support at a

mass meeting held for the purpose of deciding the matter.

The great International Livestock Exposition was formally opened last Saturday and pronounced by hundreds of competent judges from various parts of the world to be the greatest and grandest exhibition of livestock ever attempted.

Prof. J. J. Ferguson, of Swift & Company, had a very attractive and highly interesting exhibit at the stock show of bones, bone meal, dried blood, tankage, etc. Prof. Ferguson's department is devoted to the application of prepared bloods, tankages, etc., for feeding purposes.

Receipts of livestock on Monday, the opening day of the International, were 28,000 cattle, 55,000 hogs and 25,000 sheep. On the opening Monday of the International a year ago 26,417 cattle, 33,767 hogs and 31,891 sheep arrived, while two years ago 36,553 cattle, 44,164 hogs and 55,813 sheep were received.

A note in this column some weeks ago was to the effect that it had been rumored that the Northwestern Fertilizing Company would go out of business. President Prescott, of this company, writes from Cleveland, O., that there is not now and never has been any idea of going out of business. The company is prospering and sees no reason for closing up.

There was an improved demand last week for cash meats, and a little improvement in the demand for lard in the Chicago market. Nevertheless, the shipments of the latter from this market were nearly 3,000,000 lbs. less than for the corresponding week last year, while meat shipments ran nearly 2,000,000 lbs. ahead of those of a year ago. Prices are about \$2 per barrel higher than a year ago for pork and about ¾c. per lb. higher for lard and ribs. Prices of the speculative product, however, are much lower than the prices the packers are getting for their product from the actual dis-

HENRY DUMMERT
218 La Salle Street
CHICAGO

Broker and Commission Merchant
In TALLOW, GREASE and COTTONSEED OIL.
HIGHEST REFERENCES.

tributers that none of the professional speculators care to work strongly on the short side of the market, says Live Stock World. There is a large speculative holding here in the hands of the Cudahys, presumably bought on merchandising principles to await a better market.

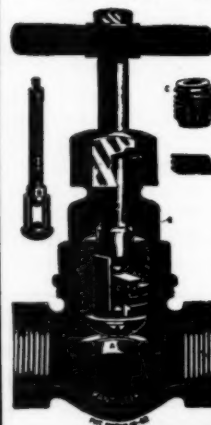
The Weir & Craig Manufacturing Co. have completed and placed in successful operation a 25-ton peat press with a capacity of 50 tons of compressed peat fuel per day. This fuel is practically smokeless, better in every respect than anthracite and can be sold for \$5 per ton at an immense profit. The Illinois Peat Fuel Co. owns the machine and expects to have fifty more built as speedily as possible.

In every particular the International Stock Show was a great and grand success. There were so many "features" that "the" feature got lost in the shuffle. It would be interesting to know just how much and of what it would take to make General Manager Skinner show the least iota of worriment or excitement. Everyone and his aunt wanted to see him about something all at once, but he never turned a hair. Just looked like some big kid at a picnic.

Burlington Brass Works BURLINGTON, WIS.

JAMES B. CLOW & SONS, Agents, CHICAGO

THE **"Kant Leek"**
VALVE



SELF-GRINDING
SELF-SEATING
ALWAYS TIGHT

Constant use improves them.
No discs to give out.
No repair kit needed.
Always ready.
It never fails.

We guarantee every valve tested to

260 POUNDS
COLD WATER

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Woodenware, Packages, Cordage, Skewers, Wax and Parchment Paper, Etc.

FRED. K. HIGBIE COMPANY, 841 and 843 RAILWAY EXCHANGE BLDG.,
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TELEPHONE. HARRISON 4400.

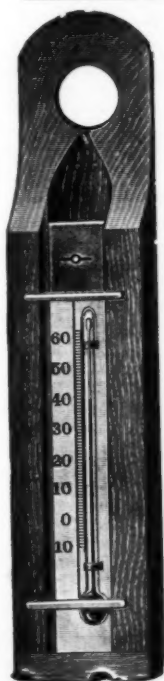
MEAT PRODUCING LEADS THEM ALL.

The fact that stock raising leads all other industries in the United States, and that the business of meat producing comes first of all, has been plainly put by President John A. Spoor, of the Chicago Stock Yards and Transit Co., into words and figures which will both surprise and enlighten the average reader. President Spoor should, from his position, be an authority on the statistics of the industry.

He says that it may be news to the average small farmer that the livestock farms of the United States, considering all the farm property in and on the farms, exceeds in value any other one class of farm investment by more than \$1,000,000,000. In the newspapers of the country, taking one year with another, the average reader is confronted with ten times the matter concerning crops that attracts his attention concerning the livestock interests of the United States. In one sense this is necessary, as without the favorable condition of the corn crop and the hay crop, at the least, the livestock industry would be eclipsed beyond a reckoning. At the same time the average reader of the newspapers has in his mind the idea of grain, rather than beef and pork, as the great product of the greatest agricultural country on the globe.

Hay and grain are tremendous factors in the welfare of the country. Taking the census returns of 1900 as a conservative and accurate basis for comparisons, the value of the farm property invested in the 1,319,856 hay and grain farms of the United States was \$6,379,548,543. But on the other hand the 1,564,714 farms devoted to livestock showed a total valuation of \$7,505,284,273, ranking the one great classification by \$1,125,735,730, and exceeding the valuations of "king cotton" and its lands by more than \$6,000,000,000.

An interesting general table is appended, showing that in spite of the low average value of the stock farms compared by the acre with almost any other classification of the farm, almost one-third of the money invested in farming in general is invested in livestock farms:



The Larmon wood case thermometer is now being generally adopted by all the packers for refrigerator cars and cellar purposes. It runs from 0 to 60 degrees and is guaranteed to one degree of accuracy. The great saving on this thermometer is that in the first place it is made very carefully and as good as any thermometer can possibly be made, and as it registers only up to 60 degrees, there is no danger of anyone carrying it off, as it is of no use as a house thermometer. The loss resulting from thermometers being taken from cars was tremendous, and since this thermometer has been adopted it is said the losses have been reduced to almost nothing.

We have sold over 15,000 of these thermometers since the first of the year and have had to replace but very few on account of their not being accurate. The thermometer is slipped down into a nice little wooden case, and when it is broken or becomes useless a new one can be purchased and replaced in the old case, which is quite a saving in itself.

We would be glad to print any customer's name on the metal plate and would be pleased to send a sample free of charge. Write for prices. **DAVIES WAREHOUSE AND SUPPLY CO.,** 20-32 N. Clark St., Chicago, Ill.

Total number farms in the United States.....	5,739,657
Total acreage all farms.....	841,201,546
Total value farms.....	\$20,514,001,838
Acreage devoted to livestock..	355,009,476
Value of lands devoted to stock raising	\$5,691,757,229
Total income from livestock for 1899	1,654,135,912
Total value of all livestock on farms in 1899.....	2,981,722,945
Total value of all domestic animals in the United States in 1899	3,196,381,818

The census figures for the cattle on farms and ranges on June 1, 1900, are colossal. There were 67,822,336 of these neat cattle of all ages, valued at \$1,476,499,714, an average of \$21.77; and in addition to these were 1,616,422 cattle not on farms and ranges and valued at \$41,102,637.

In the last ten years there has been a marked shortening of the period for preparing steers for the beef market. This is shown in the average ages of cattle on the farms and ranges. This average was 2.18 years in 1890, while on June 1, 1900, the average was only 1.63 years, indicating that nearly six months had been cut from the maturing and fattening age of the steers. But while the age of the steer has been decreased, the improved breeding and the improved methods of feeding have combined to put him on the market in a condition representing more and better meat than his older prototype did ten years ago.

Taking the country at large, Texas leads the States and Territories in the value of its meat cattle, placed by the census department at \$163,228,904. Second in order is Iowa with \$142,518,902 worth of neat cattle, and Kansas third, with a valuation of \$117,640,801. Nebraska, Illinois and Missouri are next in order, but under the \$100,000,000 for each.

In some of these figures the value of the blooded cattle introduced into the State is shown in a marked manner. For instance, Iowa has only 5,367,630 neat cattle representing its \$142,518,902 valuation, while Texas' \$163,228,904 worth of cattle numbers 9,428,196 head. Thus with nearly twice as many cattle as Iowa has, the Texas valuation is only 14.5 per cent. more. The valuation on each head in Texas is \$17.31, while Iowa cattle were averaged at \$26.55, or 53.4 per cent. higher.

There were 61,837,112 sheep in the United States in the census year, valued at \$170,337,002, from which in 1899 wool was clipped to the value of \$45,723,739. The average for each farm in this country, exclusive of the ranges, was 80.7 sheep to a farm, having an average value of \$2.76 for animals of all ages and purposes. Montana leads all States and Territories with 4,192,608 of these animals; Wyoming is second with 3,316,668; Mexico has 3,242,332, and Utah has 2,513,599. No other State or Territory passes the 2,000,000 mark in sheep. Increases in the number of sheep are shown in Wisconsin, Iowa, North Dakota,

South Dakota and Nebraska; decreases are shown in Ohio, Michigan, Illinois, Missouri and Kansas, the decrease in Kansas reaching 55.2 per cent.

During the last decade a most remarkable growth in the demand for mutton has taken place in the United States and in England. The demand for wool is also increasing and values rising. On the other hand, the world's supply of sheep is decreasing. Owing to long droughts, both Australia and South America are short, while in this country the range territory is being rapidly restricted and its ability to supply mutton and wool is unequal to the demand. Henceforth, America must depend more and more upon its farming sections for sheep, which, if well bred and well cared for, will prove especially profitable to the small farmer as a means of increased income and soil fertility.

Swine and cattle are associated in the farming industry all over the Union. The interest in the better grade of the animals may be shown in the dates of organizing the different swine breeders' associations. These are the American Berkshire association, 1875; Standard Poland China, 1877; Central Poland China, 1879; American Chester White, 1884; American Essex, 1887; American Duroc-Jersey, 1890, and Standard Chester White, 1890.

These are some of the striking facts and figures of the livestock industry in this country. They are worth a study by the layman. As census figures are now nearly four years old, most of them need additions—some of them might stand even multiplication. But as representative of the one branch of classified farming, they are calculated to point the individual citizen to the true source of wealth in this richest nation of the globe.

A BOUNTIFUL SPREAD.

The restaurant in the Morris plant at the Stock Yards has always had an excellent reputation, but manager and chef outdid themselves on the day before Thanksgiving. Their bill of fare was modestly headed "Luncheon." Whether that described it or not can be judged from the menu, which was as follows, and all spread for the employees for the insignificant sum of 25 cents:

SOUP	
Celery	Older
Puree St. Germain Cardinal	
Consomme au Mode	
ENTREES	
Calves Sweet Breasts Glaced aux Champignon	
Welsh Rarebit au Club	
ROASTS	
Roast Young Turkey, Cranberry Sauce	
Prime Roast Beef au Jus	
VEGETABLES	
Boiled Potatoes	Mashed Potatoes
Boiled Supreme Ham	Pickled Ox Tongue
COLD MEATS	
With Potato Salad	
Corned Beef	Prime Roast Beef
Boiled Supreme Ham	Pickled Ox Tongue
DESSERT	
English Fruit Cake Wine Cream	
PASTRY	
Home-Made	
Apple	Apricot
Hot Mince Pie	Brandy Sauce
Peach	
Coffee	Tea
	Milk

PARTNER WANTED

A successful salesman, with over ten years' experience in his line and who is building up a big business, is seeking a partner with \$20,000 to join him in dealing in finest assorted Russian sheep casings. Capital necessary for a stock of casings. Big profits assured. Address Casings, care of THE NATIONAL PROVISIONER, Chicago.

CHICAGO PROVISION LETTER.

(Special Letter to The National Provisioner from C. D. Forsyth & Co.)

Chicago, Nov. 30.—We quote to-day's market as follows: Green hams, 10@12 ave, 8½; do, 12@14 ave, 8½; do, 14@16 ave, 8½; do, 18@20 ave, 8. Green picnics, 5@6 ave, 6; do, 6@8 ave, 5½; do, 8@10 ave, 5½; do, 10@12 ave, 5½. Green New York shoulders, 10@12 ave, 6½; do, 12@14 ave, 6½. Green skinned hams, 18@20 ave, 9½. Green clear bellies, 8@10 ave, 9; do, 10@12 ave, 8½. No. 1 S. P. hams, 8@10 ave, 9½; do, 10@12 ave, 9½; do, 12@14 ave, 8½; do, 14@16 ave, 8½; do, 18@20 ave, 8. No. 2 S. P. hams, 10@12 ave, 8½; do, 12@14 ave, 8½; do, 14@16 ave, 7½. No. 1 S. P. skinned hams, 16@18 ave, 8½; do, 18@20 ave, 8½; do, 20@22 ave, 8½; do, 22@24 ave, 8½; do, 24@26 ave, 8½. No. 1 S. P. picnics, 5@6 ave, 6; do, 6@8 ave, 6; do, 7@9 ave, 5½; do, 8@10 ave, 5½; do, 10@12 ave, 5½. No. 1 S. P. New York shoulders, 8@10 ave, 6½; do, 10@12 ave, 6½. S. P. clear bellies, 8@10 ave, 8½; do, 10@12 ave, 8½.

Prices on S. P. meats are all loose f. o. b., Chicago.

CHICAGO PROVISION MARKET

Range of Prices.

SATURDAY, NOVEMBER 26, 1904.				
LARD—(Per 100 lbs.)—				
January	7.07	7.10	7.05	7.07
May	7.25	7.27	7.22	7.25
RIBS—(Boxed 25c. more than loose)—				
January	6.57	6.62	6.57	6.62
May	6.77	6.80	6.72	6.77
PORK—(Per barrel)—				
January	12.85	12.90	12.77	12.85
May	12.97	13.00	12.90	13.00
MONDAY, NOVEMBER 28, 1904.				
LARD—(Per 100 lbs.)—				
January	7.10	7.10	7.02	7.02
May	7.27	7.27	7.22	7.22
RIBS—(Boxed 25c. more than loose)—				
January	6.05	6.05	6.55	6.55
May	6.80	6.85	6.72	6.72
PORK—(Per barrel)—				
January	12.90	13.00	12.77	12.80
May	13.00	13.15	12.92	12.92
TUESDAY, NOVEMBER 29, 1904.				
LARD—(Per 100 lbs.)—				
January	7.02	7.02	6.97	7.00
May	7.20	7.22	7.17	7.17
RIBS—(Boxed 25c. more than loose)—				
January	6.55	6.55	6.52	6.55
May	6.75	6.75	6.70	6.72
PORK—(Per barrel)—				
January	12.80	12.82	12.70	12.77
May	12.97	12.97	12.90	12.95
WEDNESDAY, NOVEMBER 30, 1904.				
LARD—(Per 100 lbs.)—				
January	7.00	7.00	6.95	7.00
May	7.17	7.17	7.12	7.11
RIBS—(Boxed 25c. more than loose)—				
January	6.52	6.57	6.50	6.57
May	6.70	6.75	6.67	6.75
PORK—(Per barrel)—				
January	12.72	12.90	12.70	12.90
May	12.92	13.10	12.87	13.10
THURSDAY, DECEMBER 1, 1904.				
LARD—(Per 100 lbs.)—				
January	7.00	7.00	6.95	6.97
May	7.20	7.20	7.12	7.15
RIBS—(Boxed 25c. more than loose)—				
January	6.55	6.55	6.52	6.55
May	6.77	6.80	6.70	6.72
PORK—(Per barrel)—				
January	12.92	12.92	12.77	12.80
May	13.12	13.12	12.95	13.00
FRIDAY, DECEMBER 2, 1904.				
LARD—(Per 100 lbs.)—				
January	7.00	7.05	7.00	7.02½
May	7.17	7.25	7.17	7.20
RIBS—(Boxed 25c. more than loose)—				
January	6.57	6.67	6.55	6.65
May	6.75	6.85	6.75	6.85
PORK—(Per barrel)—				
January	12.87	13.00	12.82	12.97
May	13.10	13.22	13.05	13.22

LIVERPOOL STOCKS.

	Dec. 1.	Nov. 1.
Bacon, boxes	9,100	9,600
Hams, boxes	3,600	5,300
Shoulders, boxes	900	1,500
Cheese, boxes	123,100	90,900
Butter, cwt.	7,000	14,400
Lard, tcs.	2,800	3,100
Other meats, tons	1,530	1,220

CHICAGO LIVE STOCK

RECEIPTS.

	Cattle.	Calves.	Hogs.	Sheep.
Monday, Nov. 21	31,186	1,217	44,411	29,902
Tuesday, Nov. 22	10,384	890	35,213	34,188
Wednesday, Nov. 23	16,027	820	34,611	11,923
Thursday, Nov. 24	10,458	610	33,937	15,075
Friday, Nov. 25	1,420	471	17,363	1,398
Saturday, Nov. 26	—	—	—	—
Total last week	69,475	4,020	165,475	92,486
Previous week	90,091	5,521	180,850	93,194
Cor. week 1903	72,145	4,757	155,086	100,553
Cor. week 1902	54,654	3,411	161,390	104,937

SHIPMENTS.

	Cattle.	Calves.	Hogs.	Sheep.
Monday, Nov. 21	4,794	29	6,106	3,483
Tuesday, Nov. 22	5,282	123	1,808	6,759
Wednesday, Nov. 23	8,813	132	5,130	8,759
Thursday, Nov. 24	—	—	—	—
Friday, Nov. 25	5,713	271	5,004	1,482
Saturday, Nov. 26	1,369	8	2,307	1,413
Sunday, Nov. 27	—	—	—	—
Total last week	25,971	563	29,415	21,896
Previous week	30,858	547	23,809	18,703
Cor. week 1903	31,247	455	27,799	32,036
Cor. week 1902	15,736	673	14,588	24,788

*Thanksgiving Day.
Combined receipts of hogs at eleven markets for week ending Nov. 26, 1904.....442,000
Week ago462,000
Year ago373,000
Two years ago420,000
Total receipts for year to date, 19,728,000, against 19,958,000 year ago, 20,002,000 two years ago.
Receipts at six points (Chicago, Kansas City, Omaha, St. Louis, St. Joseph, Sioux City), as follows:
Cattle. Hogs. Sheep.
Week ending Nov. 26.....192,400 380,500 161,500
Week ago230,100 411,300 187,700
Year ago167,900 306,700 173,300
Two years ago156,900 299,500 188,500

CHICAGO HOG SLAUGHTER.

Chicago packers slaughtered hogs during week ending Nov. 26 as follows:
Armour & Co.....31,200
Anglo-American.....16,600
Continental.....4,100
Swift & Company.....26,800
Hammond & Co.....4,400
Morris & Co.....12,600
Boyd-Lunham & Co.....8,100
S. & S.....14,800
H. Boone & Co.....6,800
Robert & Oake.....3,000
Other packers.....20,500
Total.....148,900
Left over.....5,000
Week ago.....160,600
Year ago.....133,900
Two years ago.....158,000
Three years ago.....—

AVERAGE PRICE OF HOGS.

Week ending Nov. 26.....\$4.62
Previous week.....4.76
Year ago.....4.28
Two years ago.....6.08
Three years ago.....5.74
Estimated receipts of live stock week ending December 3:
Cattle.....75,000
Hogs.....190,000
Sheep.....110,000

AVERAGE PRICE OF GOOD BEEF CATTLE.

Week ending Nov. 26.....\$5.00
Previous week.....4.90
Year ago.....4.65
Two years ago.....5.45

CATTLE.

Choice to prime heavy.....\$6.25@87.00
Fair to good export shipping steers.....5.25@5.35
Medium beef steers.....4.15@4.75
Inferior and plain steers.....2.25@3.00
Good to fancy cows and heifers.....4.15@4.25
Fair to choice feeders.....3.00@4.15
Fair to good cows and heifers.....3.25@3.75
Good cutting and fair beef cows.....2.00@3.00
Common to good canning cows.....1.00@1.90
Bulls, poor to choice.....1.75@4.00
Calves, poor to choice.....2.75@5.00
Calves, common to fancy.....5.25@6.50
Fed Texas steers.....3.75@5.05
Grass Texas cows and steers.....3.25@3.50

HOGS.

Good to choice heavy shipping.....\$4.70@4.80
Good to choice butcher weights.....4.70@4.80
Rough to fair heavy packing.....4.50@4.60
Plain to good heavy mixed.....4.60@4.70
Assorted light shipping, 150 to 180 lbs.....4.55@4.65
Good to choice, 185 to 200 lb. weights.....4.50@4.65
Fair to choice pigs, 60 to 125 lb. weights.....3.75@3.90

SHEEP.

Choice to prime export wethers.....\$4.25@4.75
Fair to good mixed.....3.25@4.00
Fair to fancy ewes.....3.85@4.25
Fair to prime western gram wethers.....3.00@4.50
Plain to good breeding ewes.....3.40@3.90
Culls, bucks and tail-end stock.....1.75@2.75
Fat range yearlings.....4.10@5.00
Feeding yearlings, poor to choice.....3.60@4.10
Fat western range lambs.....5.15@5.60
Range feeding lambs.....4.50@5.75
Native lambs, good to prime.....5.50@6.00
Native lambs, poor to fair.....3.25@5.40

CHICAGO RETAIL FRESH MEATS.

NOTE.—It is difficult to quote flat retail figures applicable to the whole of the city, every market having a practically different scale according to location, class and volume of trade, etc.

Beef.

Native Rib Roasts.....	18@20
" Sirloin Steaks.....	18@20
" Porterhouse Steaks.....	22@25
" Pot Roasts.....	8@10
Rib Roasts from light cattle.....	8@10
Beef Steaks.....	5@8
Boneless Corned Briskets, Native.....	10
Corned Rumps Native.....	8@10
" Ribs.....	5
" Flanks.....	5
Round Steaks.....	8@10
" Roasts.....	10@12½
Shoulder Steaks.....	8@10
" Roasts.....	10@12½
" Neck End Trimmed.....	7
Roiled Roast.....	10@12½

Lamb.

Hind Quarters.....	12½
Fore ".....	10
Legs.....	15
Stew.....	8
Shoulders.....	8
Chops, Rib and Loin.....	18

Mutton.

Legs.....	10
" Steaks.....	4
Shoulders.....	8
Hind Quarters.....	9
Fore ".....	8
Rib and Loin Chops.....	14

Pork.

Pork Loin.....	9
" Chops.....	10
" Tenders.....	20
" Butts.....	10
Spare Ribs.....	9
Blades.....	6
Hocks.....	7
Pigs Heads.....	5
Leaf Lard.....	8

Veal.

Hind Quarters.....	12½
Fore ".....	10
Legs.....	14
Breasts.....	10@12½
Shoulders.....	10
Cutlets.....	20

Butchers' Offal.

Tallow.....	24@34
Mixed Bone and Tallow.....	13@24
Calfskins 5 to 15 lb.....	10@12½
Calfskins, under 5 lb. each.....	2@30

SOUTH WATER STREET MARKETS.

Live Poultry.

Turkeys.....Old, 13.....Young,	214
Chickens.....	210
Hens.....	20
Roosters.....	a 6
Springs.....	210
Ducks.....	211
Geese.....	29

Dressed Poultry.

Turkeys, Mixed weights.....	210
Chickens.....	210
Springs.....	211
Ducks.....	212
Geese.....	212

Veal.

Choice.....	9 @ 10
Heavy.....85 to 120 lbs.....	8 @ 9
Medium.....65 to 80 lbs.....	7 @ 8
Small.....50 to 60 lbs.....	6 @ 7
Coarse.....small to heavy.....	4 @ 5

Butter.

Creamery, Extras.....	25
" Firsts.....	22
" Second.....	21
Dairies, Choice.....	21
" Firsts.....	20
" Ladies.....	214
" Packing stock.....	213

Eggs.

Extras.....	22
Prime firsts.....	20
Firsts.....	20
Fresh, at mark, cases inc.....	22

Ashton, in bags, 224 lb.....	\$2.6
Eng. packing, in bags, 224 lb.....	1.4
Michigan, medium, car lots, per ton.....	3.8
Michigan, granulated, car lots, per ton.....	3.6
Casing salt, bbls., 280 lb., 2X and 3X.....	1.4

NEW YORK CITY

LIVE CATTLE.

Good to choice native steers.....	\$5.20@5.85
Medium to fair native steers.....	4.25@ 5.15
Poor to ordinary native steers.....	3.25@ 4.15
Oxen and stags.....	2.25@ 4.50
Bulls and dry cows.....	1.25@ 3.95
Good to choice native steers, one year ago	4.70@ 5.30

LIVE CALVES.

Live veal calves, prime, per 100 lbs.....	\$8.50@ \$9.00
Live veal calves, fair to good, per 100 lbs.....	7.50@ 8.25
Live veal calves, com. to med., 100 lbs.....	4.50@ 7.00
Live calves, western, per 100 lbs.....	2.50@ 4.50
Live calves, buttermilks and grassers.....	3.00@ 3.75

LIVE SHEEP AND LAMBS.

Live lambs, prime, per 100 lbs.....	\$6.12@ \$6.40
Live lambs, common to good.....	5.25@ 6.00
Live sheep, prime, per 100 lbs.....	4.25@ 4.50
Live sheep, common to good, 100 lbs.....	3.00@ 4.00

LIVE HOGS.

Hogs heavy weights (per 100 lbs.).....	@ 5.50
Hogs, medium.....	@ 5.60
Hogs, light to medium.....	@ 5.90
Pigs.....	@ 5.80
Roughs.....	4.50@ 4.70

DRESSED BEEF.

CITY DRESSED.

Choice native, heavy.....	@ 9 1/4
Choice native, light.....	9 @ 9 1/4
Common to fair, native.....	8 @ 7

WESTERN DRESSED BEEF.

Choice native, heavy.....	8 @ 8 1/4
Choice native, light.....	7 1/4 @ 7 3/4
Native, com. to fair.....	7 @ 7 1/4
Choice Western, heavy.....	@ 7
Choice Western, light.....	6 @ 6 1/4
Common to fair, Texan.....	5 1/4 @ 6
Good to choice heifers.....	6 1/4 @ 7
Common to fair heifers.....	6 @ 6 1/4
Choice cows.....	5 1/4 @ 6
Common to fair cows.....	@ 5
Good to choice oxen and stags.....	6 @ 6 1/4
Common to fair oxen and stags.....	5 1/4 @ 6
Fleshy Botswana bulls.....	4 @ 4 1/4
Fresh pork loins, Western.....	7 @ 8 1/4

DRESSED CALVES.

Veals, city dressed, prime, per lb.....	@ 14
Veals, good to choice, per lb.....	@ 13
Calves, country dressed, prime, per lb.....	@ 12
Calves, country dressed, fair to good.....	11 1/4 @ 12
Calves, country dressed, common.....	10 @ 11

DRESSED HOGS.

Pigs.....	7 1/4 @ 7 3/4
Hogs, heavy.....	6 1/2 @ 6 3/4
Hogs, 180 lb.....	@ 6 1/4
Hogs, 160 lb.....	6 1/4 @ 7
Hogs, 140 lb.....	6 1/4 @ 7

DRESSED SHEEP AND LAMBS.

Spring lambs, choice.....per lb	9 1/4 @ 10
Spring lambs, good.....	@ 9
Spring lambs, culls.....	@ 8
Sheep, choice.....	@ 7 1/4
Sheep, medium to good.....	6 1/4 @ 7
Sheep, culls.....	5 1/4 @ 6

PROVISIONS.

(Jobbing Trade)

Smoked hams, 10 lb average.....	@ 11 1/4
Smoked hams, 12 to 14 lb average.....	@ 10 1/4
Smoked hams, heavy.....	@ 10 1/4
California hams, smoked, light.....	7 1/4 @ 8
California hams, smoked, heavy.....	7 1/4 @ 8
Smoked shoulders.....	@ 8 1/4
Smoked bacon, boneless.....	@ 12
Smoked bacon (rib in).....	@ 12
Dried beef sets.....	@ 14
Smoked beef tongues, per lb.....	@ 18
Pickled bellies, heavy.....	9 @ 9 1/4

BONES, HOOF AND HORNS.

Round shin bones, av. 30-40 lb cut, per 100 bones, per 2,000 lb.....	\$50.00 a \$60.00
Flat shin bones, av. 40-45 lb cut, per 100 bones, per 2,000 lb.....	\$42.00 a 45.00
Thigh bones, av. 90-95 lb cut, per 100 bones, per 2,000 lb.....	75.00
Hoofs, per ton.....	15.00@25.00
Horns, 7 1/2 oz. and over, steers, first quality per ton	@ 35.00

BUTCHERS' SUNDRIES.

Fresh steer tongues.....	70c to 80c a piece
Fresh cow tongues.....	30c to 45c a piece
Calves' head, scalded.....	30c to 40c a piece
Sweet breads, veal.....	25c to 75c a pair
Sweet breads, beef.....	18c to 25c a lb
Calves' liver.....	25c to 50c a piece
Beef kidneys.....	7c to 12c a piece
Mutton kidneys.....	1 1/4c to 3c a piece
Livers, beef.....	4c to 5c a lb
Oxtails.....	5c to 7c a piece
Heart, beef.....	8c to 12c a piece
Rolls, beef.....	10c to 12c a lb
Tenderloin, beef, Western.....	15c to 25c a lb
Lamb's fries.....	8c to 10c a pair
Fresh pork loins, city.....	11@11 1/4
Fresh pork loins, Western.....	10@11

BUTCHERS' FAT.

Ordinary shop fat.....	2 1/4 @ 3
Suet, fresh and heavy.....	4 @ 5
Shop bones, per cwt.....	@ 25

SAUSAGE CASINGS.

Sheep, imp., wide, per bundle.....	80
Sheep, imp., wide, per keg, 50 bundles.....	\$40.00
Sheep, imp., medium, per bundle.....	60
Sheep, imp., per bundle, narrow.....	44
Sheep, imp., Russian Rings.....	
Hog, American, in tas. or bbls., per lb., F.O.B.....	42
Hog, American, kegs, per lb., F.O.B.....	42
Beef, rounds, per set, f. o. b. Chicago.....	12
Beef, rounds, per set, f. o. b. N. Y.....	13
Beef, rounds, per lb.....	3
Beef, bungs, piece, f. o. b. N. Y.....	6 1/4
Beef, bungs, per lb.....	5
Beef, middles, per set, f. o. b. Chicago.....	35
Beef, middles, per set, f. o. b. N. Y.....	37
Beef, middles, per lb.....	@ 6 1/4
Beef wassands, per 1,000, No. 1's.....	@ 5 1/4
Beef wassands, per 1,000, No. 2's.....	2 1/4 @ 3

SPICES.

	Whole.	Ground
Pepper, Sing., white.....	19	30
Pepper, Sing., black.....	14 1/2	14 1/2
Pepper, Penang, white.....	18	19
Pepper, red, Zanzibar.....	15	18 1/2
Pepper, shot.....	14	
Allspice.....	8 1/4	8
Coriander.....	9	10
Cloves.....	16 1/4	19 1/4
Mace.....	50	55

SALTPETRE.

Crude.....	3 1/4 @ 4 1/4
Refined—Granulated.....	4 1/4 @ 4 1/4
Crystals.....	4 1/4 @ 5 1/4
Powdered.....	4 1/4 @ 5

GREEN CALFSKINS.

No. 1 skins.....	\$.24
No. 2 skins.....	.18
No. 1 B. M. skins.....	.16
No. 2 B. M. skins.....	.16
No. 1, 12 1/4-14.....	2.00
No. 2, 12 1/4-14.....	1.75
No. 1 B. M., 12 1/4-14.....	1.80
No. 2 B. M., 12 1/4-14.....	1.60
No. 1 kips, 14-18.....	2.25
No. 2 kips, 14-18.....	2.00
No. 1 B. M. kips.....	2.00
No. 2 B. M. kips.....	1.75
No. 1 heavy kips, 18 and over.....	2.60
No. 2 heavy kips, 18 and over.....	2.35
Branded skins.....	.12
Branded kips.....	1.50
Heavy Branded kips.....	1.75
Ticky skins.....	.12
Ticky kips.....	1.60
Heavy Ticky kips.....	1.80
No. 3 skins.....	.12

DRESSED POULTRY.

FRESH KILLED—ICED.

Spring Turkeys — dry-picked, fancy, 7 to 10 lbs, each.....	20@21
Dry-picked, average best run.....	@ 15
Turkeys—Old.....	15@17
Spring Chickens—Phila., 8@9 lbs. to pair, per lb.....	19 @20
Phila., mixed sizes, per lb.....	14 @15
Pa., 7@8 lbs. to pair, fancy, per lb.....	14 @15
Pa., mixed sizes.....	12 1/4 @13
Western, dry-picked, broilers, fancy.....	14 @15
Western, dry-picked, large roasters.....	12 1/4 @13
Western, dry-picked average best, per lb. 10	@12

Ohio and Michigan, scalded, fancy.....	12 1/4 @13
Ohio and Mich., scalded, average run.....	10 @12
Other Western, scalded, 8 lbs and over to pair, fancy, per lb.....	12 1/4 @13
Other Western, av. best.....	10 @12
Western, scalded, inferior, per lb.....	8 @ 9
Fowls—Western, dry-picked, average best.....	11 1/4 @12
Ohio & Mich., scalded, per lb.....	11 1/4 @12
Other Western, scalded, average best.....	11 1/4 @12
Western & Southern fowls and chickens, poor to fair.....	8 @ 9
Old cocks, per lb.....	8 1/4 @9
Spring Ducks—Maryland, fancy.....	15 @16
Ohio & Michigan, choice.....	14 @15
Western, choice.....	13 @14
Western, fair to good.....	10 @12
Spring Geese—Eastern, white.....	16 @17
Eastern, dark.....	14 @15
Maryland.....	13 @14
Western, choice.....	12 @13
Western, fair to good.....	10 @11
Squabs—Prime, large, white, per dozen.....	@2.75
Mixed, per dozen.....	2.25@2.37
Dark, per dozen.....	1.75@2.00

LIVE POULTRY.

Spring chickens, nearby & Western, per lb.....	@11
Fowls—per lb.....	@11
Roosters—Old per lb.....	@ 7
Turkeys—Old per lb.....	11@12
Ducks, Western, average, per pair.....	80 @90
Southern, average, per pair.....	60 @75
Geese, Western, average, per pair.....	1.03@1.75
Southern, average, per pair.....	1.25@1.37
Live Pigeons, per pair.....	@ 20

GAME.

Quail, per doz.....	3.50 a 3.75
English snipe, per doz.....	2.00@2.50
Plover, Golden, per doz.....	2.25@2.75
Plover, Grass, per doz.....	1.50@2.50
Woodcock, per pair.....	1.00@1.25
Partridges, per pair.....	1.50@2.00
Grouse, per pair.....	2.00 a 2.50
Wild ducks, Canvas, per pair.....	1.00 a 2.50
Wild ducks, Red-head, per pair.....	1.00 a 1.50
Wild ducks, Mallard, per pair.....	75 a 1.00
Wild ducks, Ruddy, per pair.....	65 a .75
Wild ducks, Teal, blue-wing, per pair.....	40 a .60
Wild ducks, Teal, green-wing, per pair.....	35 a .60
Wild ducks, common, per pair.....	25 a .45
Rabbits, Cotton-tail, per pair.....	25 a .35
Rabbits, Jack, per pair.....	65 a .75

FERTILIZER MARKETS.

BASIS, NEW YORK DELIVERY.

Bone meal, steamed, per ton.....	\$22.00 @23.00
Bone meal, raw, per ton.....	25.00 @26.50
Nitrate of soda—future.....	8.80@ 2.39 1/4
Nitrate of soda, spot.....	2.30 @ 2.33
Bone black, spot, per ton.....	13.50 ch
Dried blood, N. Y., 12-13 per cent. ammonia.....	3.55 @ 3.80
Dried blood, West. high grade, fine ground, c. f. N. Y.....	2.90 @ 3.05
Tankage, 9 and 20 p. c. f. o. b. Chicago.....	21.40 @22.00
Tankage, 8 and 20 p. c. f. o. b. Chicago.....	18.00 @19.00
Tankage, 7 and 30 p. c. f. o. b. Chicago.....	15.00 @16.00
Tankage, 6 and 35 p. c. f. o. b. Chicago.....	14.00 @15.00
Garbage tankage, f. o. b. New York.....	8.00 @ 9.00
Fish scrap, dried, 11 p. c. ammonia and 15 p. c. bone phosphate.....	30.00 @31.00
Wet, acidulated, 8 p. c. ammonia, per ton.....	14.00 @15.00
Azotone, per unit, del. New York.....	2.60 @ 2.65
Sulphate ammonia gas, for shipment, per 100 lbs.....	3.00 @ 3.05
Sulphate ammonia gas, per 100 lbs. spot.....	2.97 1/4 @ 3.00
Sulphate ammonia bone, per 100 lbs.....	3.90 @ 3.95
So. Carolina phosphate rock, ground, per 2,000 lbs., f. o. b. Charleston.....	6.50 @ 7.75
So. Carolina phosphate rock, undried, f. e. b. Ashley River, per 2,400 lbs.....	3.50 @ 3.75
The same, dried.....	3.75 @ 4.00

POTASHES, ACCORDING TO QUANTITY.

Kainit, shipment, per 2,240 lbs.....	\$9.95 @ 9.50
Kainit, ex-store, in bulk.....	9.50 @10.05
Kieserit, future shipment.....	7.00 @ 7.25
Muriate potash, 80 p. c. ex-store.....	1.88 @ 1.95
Muriate potash, 80 p. c. future shipment.....	1.80 @ 1.90
Double manure salt (40@49 p. c., less than 2 1/4 p. c. chloride), to arrive per lb. (basis 48 p. c.).....	1.09 @ 1.12
Sulphate potash, to arrive (basis 90 p. c.).....	2.38 @ 2.50
Sylvinit, 24 to 30 p. c., per unit, S. F.....	40 @ 40

LIVE STOCK REVIEWS

CHICAGO

(Special to The National Provisioner from the Bowles Live Stock Commission Company.)

Chicago, Nov. 30.

CATTLE.—Receipts of cattle the first three days this week, 63,403, being about 6,000 more than the same time last week. The daily offerings were: Monday, 29,926; Tuesday, 9,477; Wednesday, estimated 24,000. The market at the opening of the week was steady on choice cattle such as sold at \$6.00@7.00. Medium and common kinds were in heavy supply and 10c. lower. This being the week of the International Live Stock Exposition, the receipts of cattle are swelled to some extent by shippers who wish to visit the show and brought a few cars of cattle along. The show is the best that ever happened and the Aberdeen Angus have won the Grand Championship over all breeds in the carload lots and individuals. The latter having been won by the Minnesota Agricultural College with the two-year-old Grand Champion steer "Clear Lake Jute 2d," that will be sold in the auction by this company on Friday morning. The regular market to-day was again steady on the good kinds with tops at \$7.25 for several cars of prime steers and a big string of good cattle sold from \$6@7. The good well finished kinds and of medium quality sold principally from \$5.50@6.10, and the medium finished lots at \$4.75@5.35. Plain light steers, \$4.25@4.65, and inferior little killers down to \$2.75. 5,000 range cattle arrived the first three days this week, against 13,000 last week. These sold mostly from \$3.15@3.65, with the good ones around \$4. Butcher stock ruled steady and stockers and feeders in fair demand at firm prices.

HOGS.—Receipts of hogs for the first three days this week, 140,110, compared with 104,235 for the same time last week, showing an increase of 35,875. While liberal receipts were looked for this week, very few in the trade expected the large supply that has materialized. Monday's official receipts were 52,110, and prices were 5@10c. lower. A good clearance was made, however, at the decline, and the market closed strong. Tuesday's receipts were liberal, being estimated at 38,000, and the market was again about 5c. lower. To-day (Wednesday) receipts are estimated at about 50,000. The market opened very slow, with buyers bidding 5@10c. lower, and most of the sales were made on that basis. The shipping demand is very light, which leaves the market in the complete control of local packers. The big packers started out to-day trying to buy a drove of hogs under \$4.50, but the market came as near being a \$4.50 market as it was possible to quote. Top hogs sold around \$4.62½, with very good droves of mixed hogs carrying a strong butcher top about \$4.55. Light mixed sold largely at \$4.40@4.50. The market closed comparatively strong. However, there was some late trains arriving after the market that could not be sold. Indications point to continued liberal receipts, and while we do not look for any severe break in prices we are inclined to look for a somewhat lower market.

SHEEP.—Receipts for the past few days have been fairly liberal. The market has held up well on all classes of fat feeding sheep and lambs. Choice lambs sold to local butchers yesterday at \$6.15. Very good can be had at \$5.75@5.90. Cull lambs in strong demand at \$4.25@4.75 and medium grades at \$3.25@5.50. Prime heavy native ewes, \$4.25@4.40, the good kind around \$4.00. Cull sheep in the native line are very hard sellers, and very thin old ewes selling at \$1.00@1.50 per head, with decent culls at \$2.50@2.75 per cwt. A fair run of Western range stuff was had, but most of it feeders, all of which found a ready outlet at strong prices, few Western lambs selling at \$5.50@6.00. Yearlings, \$4.75@5.25; wethers, \$4.25@4.75. A fair demand is still had for breeding ewes, with fair to best selling at \$3.25@4.00.

KANSAS CITY

(Special to The National Provisioner.)

Kansas City, Mo., Dec. 2.

CATTLE.—Receipts this week 53,700; last week, 58,000; same week last year, 47,500. Liberal receipts of range cattle the first two days caused a slow market and medium to common cows lost ten to twenty cents. Beef cattle remained steady and the last two days have sold strong to ten higher. The top for the week was six dollars, but above five fifty are scarce; the majority range from four fifty to five twenty-five. Grass steers have sold steady; heavy fat cows are steady, but all others are lower; canners are a quarter lower; veals firm at six and a quarter; stockers and feeders steady, demand good.

HOGS.—Receipts this week, 76,200; last week, 58,500; same week last year, 42,700. How prices are ten cents lower for the week. The market is strong to five cents higher to-day; top, four seventy; bulk, four thirty to four sixty; pigs, four dollars to four and a quarter. Quality is improving, but average weight for November was only one ninety, against two hundred and eleven last November. Packers are strong competitors, despite the relative high prices here and the liberal receipts.

SHEEP.—Receipts this week, 26,500; last week, 16,300; same week last year, 30,500. Muttons and lambs close the week about steady, after a small loss Monday. A good share of the run this week was from the range country, but fed stock will predominate after this week. Fed lambs bring \$5 to \$6; yearling, \$4.50@5.00; wethers up to \$4.90; ewes, \$4.50. There are plenty of thin sheep this week for the country, but prices remain steady.

HIDES are strong. Green salted, 9½c.; side brands, over 40 pounds, 9c.; bulls and stags, 8c.; uncured, 1c. less; horse hides, \$2.50 to \$3.25; dry flint sheep pelts, \$13.

Packers' purchases this week:

	Cattle.	Hogs.	Sheep.
Armour	11,260	31,326	4,458
Cudahy	6,548	22,484	2,469
Fowler	2,033	—	452
Ruddy	872	—	223
Schwarzschild	4,396	6,183	3,885
Swift	8,063	19,369	5,259

OMAHA

(Special to The National Provisioner.)

South Omaha, Nov. 29.

On account of the continued fine weather receipts have been unusually liberal lately, showing a considerable increase over this time last year. Most of the cattle are coming from the range country and ranchmen are evidently sending in a good many cattle that ordinarily would have been carried over to next year. Very few corn-fed cattle are coming and the market continues rather low and unsatisfactory on the bulk of the fed stuff. Good to choice dry lot beefs are scarce and firm, but prices are shading lower right along on the short fed and partly fatted grades. One Western range cattle values have ruled strong right along, the demand from packers being active and the competition from feeder buyers good. Good to choice corn-fed beefs are selling at \$5.60@6.25, but the bulk of the short fed stuff is selling around \$4.00@4.80. Choice range beefs are quoted up to \$4.75, but the bulk of the trading is around \$3.40@4.00. There has been a good demand and a strong market right along for cows and heifers as the packers evidently have liberal orders for this class of beef, some say on account of the heavy demand from the Japs for barreled beef. Prices for grass cows and heifers range from \$1.75 to \$3.50, with the bulk of the fair to good butcher and beef stock at \$2.35@2.85. There has been a very fair trade in stockers and feeders and prices are fully as high as a week ago and possibly

a shade higher. The demand keeps up well from all sources and most of the time the supply has been entirely inadequate. Good to choice feeders are quoted at \$3.50@4.00, with the fair to good grades at \$3.10@3.50 and common to fair kinds and odds and ends around \$2.40@3.00 and from that down.

Receipts of hogs are becoming more liberal and the quality of the offerings has seldom been better at this time of the year. Local packers are doing the big bulk of the buying, but there is enough inquiry from shippers to make business brisk every day. Prices are still on the toboggan and struck the low notch of the season to-day. It is evident that packers being apparently unable to work up enough interest in provisions to bring about an advance, have come to the conclusion that their only course is to pound the hog market harder. Weights cut very little figure, although the heavy and butcher grades still have a shade the best of it. Quality is not so closely looked after either, as the hogs are nearly all good. The main thing with buyers evidently is to get the prices down. Still local figures are well in line with Eastern markets, and for this reason a liberal share of the receipts are coming from points east of the Missouri River. To-day, with about 12,000 hogs here, the market was a shade lower, tops selling at \$4.55 and the bulk of the hogs around \$4.45@4.50.

Sheep supplies have been very moderate and the quality nothing extra, as is usually the case just before the range season closes and the feed season begins. The demand has been vigorous, both for fat stock and feeders and the supply has been unequal to the demand all the time of late. Packers are all after the fed stock, but nothing very choice in this line has yet been received. On the grass stock packers and feeder buyers are paying just about the same prices, values in general averaging just a shade better than a week ago.

ST. JOSEPH

(Special to The National Provisioner.)

South St. Joseph, Mo., Nov. 29.

Receipts thus far this week have been of liberal proportions, and while the demand has been very strong, there was not much activity shown until the little strength gained last week was lost. Good fat steers, and especially prime ripe offerings, show practically no change, but others are generally weak to 10c. lower. Prime steers have sold up to \$6 this week and a pretty handy kind have sold around \$5.40@5.50. Cows and heifers broke about 10c. to-day on all but the primest offerings, while bulls and veals show but little change. There has been more life to the stocker and feeder trade than for three weeks past. Prices had been reduced to a very low ebb and country buyers were attracted in pretty good numbers, and the competition thus afforded enabled dealers to advance prices 10c. to 15c. over the low figures prevailing ten days ago. Prices of all kinds of stocker stuff is considered at the low point of the season, for the season of bad weather is fast approaching and can be looked for any day, and this will result in supplies being held back, thus creating a shortage in the principal markets, which will be followed by a higher range of values.

Receipts of hogs to-day were approximately 13,000, and they were also large at other points. In consequence prices broke 10c., ranging from \$4.15 to \$4.65, with the bulk selling at \$4.30 to \$4.55. Included in the receipts were a large percentage of light and light mixed, as well as pigs, and as these grades are being discriminated against they should be held in the country and finished. The demand here continues exceptionally strong, however, and current prices are as high as in Chicago.

Sheep and lambs have been in light supply, and while prices show no particular change, who have not filled their feed lots or obtained the requisite number for roughing through the winter should take advantage of present conditions.

CATTLE SLAUGHTERED.

Special reports to The National Provisioner show the number of cattle slaughtered at the following centres for the week ending November 26:

Chicago	43,504
Omaha	15,100
Kansas City	31,153
St. Joseph	13,410
Cudahy	401
Sioux City	2,459
Louisville	1,210
New York and Jersey City	9,649
Detroit	1,211
Buffalo	14,175

HOGS SLAUGHTERED.

Special reports to The National Provisioner show the number of hogs slaughtered at the following centers for the week ending November 26:

Chicago	145,060
Omaha	47,445
Kansas City	69,613
St. Joseph	36,152
Cudahy	10,377
Sioux City	13,098
Ottumwa	17,694
Cleveland	15,500
Cedar Rapids	12,060
Bloomington	2,037
Indianapolis	24,316
Louisville	11,321
New York and New Jersey	42,240
Detroit	9,291
Buffalo	58,650

SHEEP SLAUGHTERED.

Special reports to The National Provisioner show the number of sheep slaughtered at the following centres for the week ending November 26:

Chicago	70,590
Omaha	11,877
Kansas City	10,047
St. Joseph	6,991
Cudahy	295
Sioux City	40
New York and Jersey City	31,011
Detroit	3,875
Buffalo	81,000

NEW YORK LIVESTOCK

WEEKLY RECEIPTS, NOVEMBER 28, 1904.

	Bees.	Cows.	Calves.	Sheep.	Hogs.
Jersey City	2,540	—	520	18,934	751
Sixtieth st.	2,150	55	2,326	12,541	—
Fortieth st.	—	—	—	—	28,849
Lehigh Valley	6,000	—	—	—	—
Weehawken	1,125	—	—	1,880	—
Scattering	—	64	72	38	12,640
Totals	11,830	119	2,918	33,391	42,240
Totals last week	11,061	139	4,497	35,364	43,334

WEEKLY EXPORTS.

	Live cattle.	Live sheep.	Qrs. of beef.
Schwarzschild & S., Ss. Victorian	400	—	—
Schwarzschild & S., Ss. Minnesota	375	—	1,800
Schwarzschild & S., Ss. British Princess	350	—	—
Schwarzschild & S., Ss. St. Paul	—	—	1,200
J. Shamberg & Son, Ss. Victorian	400	1,280	—
J. Shamberg & Son, Ss. Minnesota	375	—	—
J. Shamberg & Son, Ss. British Princess	350	1,050	—
J. Shamberg & Son, Ss. Cearense	50	—	—
Morris Beef Co., Ss. Victorian	—	—	3,400
Morris Beef Co., Ss. Majestic	—	—	1,100
Swift Beef Co., Ss. Majestic	—	—	1,600
Armour & Co., Ss. Victorian	—	—	1,900
Armour & Co., Ss. St. Paul	—	—	2,200
Cudahy Pkg. Co., Ss. Umbria	—	—	1,500
A. B. Outerbridge & Co., Ss. Caribbee	—	50	—
Total exports	2,300	2,380	14,700
Total exports last week	1,726	1,295	15,700
Boston exports this week	2,591	1,874	9,970
Baltimore exports this week	1,091	1,625	—
Philadelphia exports this week	408	—	—
Portland exports this week	630	1,226	—
Newport News exports this week	585	—	—
To London	3,274	2,579	3,070
To Liverpool	6,307	9,379	15,200
To Glasgow	1,713	1,381	—
To Bristol	195	300	—
To Antwerp	300	—	—
To Manchester	300	—	—
To Southampton	—	—	3,400
To Para, Brazil	50	—	—
To Cape Town	45	—	—
To Bermuda and West Indies	—	50	—
Totals to all ports	12,155	13,689	21,670
Totals to all ports last week	8,395	6,548	20,300

GENERAL MARKETS

LARD IN NEW YORK.

Western steam, \$7.30; city steam, \$6.87½; refined, Continent, tcs., \$7.35; do., South America, tcs., \$8.10; do., kegs, \$8.90; compound, \$5.25@5.50.

HOG MARKETS, DECEMBER 2.

CHICAGO.—Receipts, 30,000; strong; 5c. up; \$4.25@4.65.

KANSAS CITY.—Receipts, 9,000; strong; \$4.05@4.70.

OMAHA.—Receipts, 70,000; strong; \$4.40@4.50.

ST. LOUIS.—Strong; \$3.50@4.65.

INDIANAPOLIS.—Receipts, 11,000; steady; \$4.25@4.70.

CLEVELAND.—Receipts, 65 cars; active; mixed, \$4.70.

EAST BUFFALO.—Receipts, 5,100; steady; \$4.50@4.85.

LIVERPOOL.

Liverpool, Dec. 2.—(By cable)—Beef extra India mess, 66s. 3d.; pork, prime mess, Western, 68s. 9d.; shoulders, 41s.; hams, s. c., 43s.; bacon, c. c., 41s.; long clear, light, 44s.; do., heavy, 43s.; short ribs, 45s.; backs, 42s. 6d.; bellies, 51s.; turpentine, 37s.; rosin, common, 7s. 3d.; prime Western, tcs., 37s.; do., 28-lb. pails, 36s. 3d.; cheese, white, 47s. Cheese, colored, 48s.; American steam lard (Hamburg 50 kilos), 35½ marks; tallow, 22s. 9d.; tallow Australian (London), 26s. 6d.; cottonseed oil (Hull), 16s. 1½d.; linseed oil (London), 16s.; Calcutta linseed, spot, 35s.; petroleum, refined (London), 5½d.

OLEO AND NEUTRAL LARD.

The oleo market is steady, and the business doing now is Christmas business, and that may cause some activity during the next few weeks, but oleo oil is higher than neutral lard, and hence the consumption of the latter article is likely to increase and that of the former to diminish. At this time of writing the value of the best oleo oil is about 53 florins, and the best neutral lard about 47 florins, but cotton oil has suffered another decline, and the market for that seems to be weak.

THE GLUE MARKET.

(Special Letter to The National Provisioner.)

Chicago, Nov. 28.—From our investigations among various lines of manufacturers who use glues and gelatines, we find a very satisfactory feeling existing as to prospects for continued good business. So far as the general market on the different grades of this commodity is concerned, our opinion is that present prices will continue. There seems to be a tendency to lower prices for immediate deliveries on high-grade gelatines. This is due largely to competition on foreign goods coming in this time of the year from Europe. This will only effect prices on gelatines, such as are used by the confectioner, ice cream and biscuit trade.

All classes of glue stock, including green, dry salted and air dried, have been freely offered and ready buyers found at prices consistent with the marketable article. Present market quotations are as follows: Gelatine glue, extra, 22@30; No. 1, 18@22; regular, 16@18.

White, 1st, 12½@15; 2nd, 11@12½; 3d, 9@11.

Cabinet, high test, 14½@16½; medium, 11½@14½; ordinary, 9½@11½.

Sizing, medium, 6¼@7¼; brown, 7¼@8¼; dark, 8¼@9¼c.

FRIDAY'S CLOSINGS.

Provisions.

Hog receipts at the packing points, while not as large as before through the week, were for the day of fair volume, with their prices stronger. The products market opened a little stronger, but soon slackened and were very quiet on speculation, afterwards rallying a little.

Chicago stock: 1,950 bbls., New York; 28,000 bbls. old pork; 20,000 bbls. other pork; 19,500 tcs. contract lard, 10,000 tcs. other, do., 3,950,000 pounds short ribs.

Cotton Seed Oil.

To-day's market in New York was somewhat steadier, with some little speculative inquiry, especially for May. Sales 200 bbls. prime yellow, March, 27c.; 500 bbls. do., Jan., 25½c.; 3,000 bbls. do., January, at 26c., and 100 bbls., May, 28c. Prime yellow, December, 25½@26c.; January, 26@26½c.; February, 26½@27c.; March, 27@27½c.; May, 27½@28c. Crude in tanks at Southeast mills at 19c., and in the Valley at 19c., while in Texas 18c. is bid.

Tallow.

The situation looks slacker all around, without, however, as yet at least, absolute change in prices. Bids on city hhd. have been withdrawn; nevertheless the New York melters are busy making deliveries of city hhd. on contracts, which will be completed next week, and a better test then will be had of the possibilities of selling, than at present. The nominal price for city hhd., is 4½c.

Oleo Stearine.

Quiet at 6¼c. bid in New York.

CHEMICALS AND SOAP SUPPLIES.

(Special Letter to The National Provisioner.)

New York, Dec. 1.—The market is as follows:

74 per cent. caustic soda, \$1.85 to \$1.90 for 60 per cent.

76 per cent. caustic soda, \$1.90 to 2c. for 60 per cent.

60 per cent. caustic soda, 2½c. per pound.

98 per cent. caustic soda, 3¼c. pound (powdered).

58 per cent. pure alkali, 90c. to 1c. for 48 per cent.

48 per cent. carbonate soda ash at \$1.10 per 100 pounds.

Borax at 8c. per pound.

Talc at 1½c. pound.

Palm oil, in casks, 5¼c. pound; barrels, 6½c. pound.

Green olive oil at 56c. to 57c. per gallon.

Yellow olive oil at 55c. per gallon.

Green olive oil foots, 6¼c. to 6½c. pound.

Ceylon coconut oil at 7¼c. pound.

Cochin coconut oil, 7½c. to 7¾c. pound.

Cottonseed oil at 29c. to 31c. per gallon.

Corn oil at 3.75c. to 3.90c. per pound.

Rosin: K, \$4.40; M, \$4.80; N, \$5; WG, \$5.25; WW, \$5.50 per 280 pounds.

RECEIPTS AT CENTRES

SATURDAY, NOVEMBER 28.

	Cattle.	Hogs.	Sheep.
Chicago	4,000	22,000	3,000
Kansas City	100	5,000	—
Omaha	350	9,300	—

MONDAY, NOVEMBER 28.

	Cattle.	Hogs.	Sheep.
Chicago	28,000	55,000	25,000
Kansas City	16,000	7,000	7,000
Omaha	3,000	4,500	8,700

TUESDAY, NOVEMBER 29.

	Cattle.	Hogs.	Sheep.
Chicago	9,000	38,000	25,000
Kansas City	21,000	18,000	6,000
Omaha	3,800	8,000	5,700

WEDNESDAY, NOVEMBER 30.

	Cattle.	Hogs.	Sheep.
Chicago	24,000	50,000	22,000
Kansas City	8,000	14,000	5,000
Omaha	4,800	14,000	1,500

THURSDAY, DECEMBER 1.

	Cattle.	Hogs.	Sheep.
Chicago	11,000	40,000	18,000
Kansas City	5,000	16,000	4,000
Omaha	3,000	12,000	2,300

FRIDAY, DECEMBER 2.

	Cattle.	Hogs.	Sheep.
Chicago	3,000	30,000	8,000
Kansas City	1,500	7,000	750
Omaha	2,000	7,000	1,000

RETAIL SECTION

MICHIGAN BUTCHERS TO ACT.

The Michigan State Butchers' Association has called a meeting at Saginaw for Dec. 15, at the request of the Detroit local organization, which wishes action taken to compel Sunday closing. Legislative action will be sought if necessary requiring all markets to be closed. Another important topic for consideration is the restriction of the trade to those able to pass an examination in proper cutting and caring for meats, thus doing away with the incompetent. The State Association is a new organization, but it has many local bodies working with it, and its action will be of interest to the trade of the entire State.

"SYMPATHETIC" MEAT PLANTS.

There will be concerted action next year, it is said, among butcher organizations to erect "sympathetic" meat and fat smelting plants in various parts of the country. Among the bruited plans is a soap factory scheme. Whether this is merely winter talk or will become more serious remains to be seen. Several spasmodic and three or four real efforts have been made by the retailers to start abattoirs. The great handicap is the disposition of the trade to cut up stuff. The whole carcass is being sold less and less yearly. The butcher buys his rounds, or his ribs, or his shorter long chuck or hind or what not. More and more the cut piece sales succeed the old carcass trade and there is trouble to sell the leavings.

TOUGH CATTLE FOR SOUP STOCK.

According to a famous French chef in London, he has to send to his native land for proper meat for soup stock. He declares that only the beef from plough cattle makes the best stock for his delicious soups, and it is in France only that he can find a cattle that draw the plough. Judging from the character of much of the half-finished stuff that has been the chief feature for weeks in our retail markets, this chef could find all the soup stock he wants on this side.

"French beef," said this chef in a talk with a London Times writer, "has not so succulent a flavor or exquisite a grain as other beef. Yet it makes a better base for stock, because it has in it more of the gelatinous quality which is as much to be desired in the soup pot as it is to be avoided for the purposes of a sirloin. This is the case because only regular exercise, and hard exercise at that, will develop that peculiar gelatine, that noble sap of beef, and it is only in France that I am able to obtain the legs of beeves that have drawn the plough. When I first began buying plough cattle in France for my kitchen, people thought that I was mad; but I had observed when I was a boy that a peasant's soup was never better than when he had been forced to kill one of his oxen from the plough."

SUPPRESSION OF TURKEY RAFFLES.

The suppression of turkey raffles developed into quite a popular reform fad during the recent Thanksgiving season, but it was a fad appreciated both by dealers and consumers. In many cities throughout the country police regulations against saloon raffles were strictly enforced, either through the insistence of the butchers' and poultry dealers' associations, or because of other pressure. The movement

originated in St. Louis and spread rapidly. Discussing the effects of raffles and their suppression a prominent St. Louis butcher said at a recent meeting of his association:

"The suppression of saloon poultry raffling not only decreased the demand, but also reduced the price of turkeys to butchers and consumers. As a matter of fact, there will probably be as many or more turkeys sold as last year, but they will go through the legitimate channels of trade, the butcher or grocer. In this connection it is well to remember that it is the poor men who are the most effected by these saloon poultry raffles. You will find that poultry raffling thrives only in the poor neighborhoods. The suppression of these saloon poultry raffles are not only beneficial to the butchers and grocers, but they are beneficial to the poor man, as well as his wife and children. There are many families in this city who will probably have a turkey this year who would not if these poultry raffles had not been suppressed.

"A woman came into my market a year ago and said: 'My husband won a turkey and it cost him thirty-five cents.' She didn't say anything about the cost for treating, etc. Unless it was a money-making proposition the saloon men could not be so tenacious in holding on to what has become an unmitigated and demoralizing evil. Last year a man had the audacity to come into my market and want to borrow a dollar to try his luck at a turkey raffle, in face of the fact that I had them on sale. Last year I paid 18 cents a pound at wholesale and because of the decrease demand caused by the numerous turkey raffles, I was obliged to sell as low as 12½ cents. This year the wholesale price ranges from 13½ to 14 cents a pound, and as a result consumers buy them from 16 to 18 cents. It is apparent, therefore, that the suppression of saloon poultry raffling has benefited the community generally."

CREDIT BY RETAILERS.

Credit-giving is one of the most important branches of business. It requires study, caution and conservatism. It is a vital factor in the conduct of a retail store, and if not properly handled, brings about very unfortunate results.

All men who become retailers do not make their start backed up by what is nowadays designated as a business education, and consequently the acquisition of proper methods for intelligently regulating credits is seldom attained by the average retailer until bitter experience demonstrates to him the only way to keep himself on the right side of his ledger. The question, however, so frequently forces itself to notice that even the most stupid beginner learns its importance almost at the start. He is necessarily a credit-seeker himself, and before he can get an ounce of stock on credit in the wholesale market he must show his hand, so to speak. Even with good references and a fair balance in bank, his account will not be allowed to run much over seven days, and "lapping" one week on another is not likely to be tolerated at all. In addition to making prompt payments, he is expected to keep his wholesaler in touch with his financial affairs. The wholesaler, of course, gathers his data through other channels likewise and generally knows if his customer is what is known as "easy" or "a good fellow," and also if he is a patron of the race track or poolrooms or even plays poker in a quiet way.

All such things have a very material bearing on the relation between wholesaler and retailer and afford the latter at once an object lesson in the way which he himself should handle his custom in this essential.

Statistics show that from 90 to 95 per cent. of all persons who go into business fail. This is almost an incredible statement and would be received with considerable doubt if actual figures were submitted in proof. Of course, the causes of failure are varied and many, but credit giving by retailers will be found high up on the list.

The butcher has every right to know who his customer is and what basis he has for credit. He knows what his wholesaler expects of him and he in turn is entitled to request such information as will enable him to act intelligently in the premises. It is a business proposition and should be carefully followed up.

There are all kinds of humbugs looking for credit, particularly from marketmen. Fine feathers do not always make fine birds, and the retailer should never allow himself to be deceived by appearances. Politeness, of course, is a paramount essential in dealing with customers, prospective or otherwise, and when harnessed to firmness and up-to-date methods, is sure to lead to success.

If Mrs. Jones makes a call and says that she desires to open an account the retailer owes it to himself to see Mr. Jones. If Jones is a business man and wishes for his own convenience to open a weekly or monthly bill it is not possible that he can object to give the requisite information about himself, and it is of such vital importance to the retailer that he should insist that unless he does the account cannot be opened.

This whole subject cannot get too much consideration from retail butchers. It represents the quicksand into which many are hopelessly drawn before it is possible for them to extricate themselves.

**WE will draw you
plan and sub-
mit estimate for**

**OVERHEAD
TRACKING,
With All Appliances**

R. T. RANDALL & CO.

331-333 North Second Street
PHILADELPHIA.

Refer to our ad. on page 11.

LOCAL AND PERSONAL.

R. H. Harris is opening a shop at Fredonia, Kas.

Cate & Son have opened a market in Hillsboro, Ore.

S. D. Stephens has opened a shop in Wells-ville, Kas.

W. W. Bunn has opened a market at John Day, Ore.

J. A. Brown has opened a market at La Harp, Kas.

J. A. Greenwood has opened a market in Holden, Mo.

Edwards & McAlpin have opened a shop in Portland, Ore.

Louis Scheff will open a "star" market at Peekskill, N. Y.

F. A. Wyman has acquired a meat trade in Hartland, Me.

Kissling Bros. have established a market in Portland, Ore.

Roscoe Kincaid has opened a market in Mound City, Kas.

Edward Schagrin has started a meat shop at Youngstown, O.

Hulton & Kesterson, of Broadlands, Ill., have opened a market.

G. W. Young has engaged in the meat business at Burns, Ore.

H. Mossey has bought the market of N. Dufort at Cohoes, N. Y.

J. Clark has succeeded to the shop of Clark & Tipton at Hardy, Neb.

William Miller has sold his shop to Hein Bros. at Grand Island, Neb.

F. Trinkle has sold his shop to Bushnell & Olday, of Alliance, Neb.

R. H. Boekeloo, of Kalamazoo, Mich., will open another market soon.

Jas. Crew has sold his shop to Whitmore & Harvey, of Clearfield, Ia.

John Smith has sold his market to O. O. McCaslin at Castleton, Kas.

Harry Tarman, of El Paso, has bought Heller's market at Secor, Ill.

Owen & Corkadell will engage in the meat business at Valley Falls, Kas.

Mead and Levan have purchased the store of E. W. Floyd at Salem, O.

W. N. Reynolds has bought the market of E. B. Peck at Litchfield, Conn.

Chas. J. Shaw has succeeded to the shop of Seover & Shaw at Edgar, Neb.

W. A. Henry has purchased the shop of Carroll & Larkin, at Colfax, Wash.

W. A. Cox has succeeded to the meat market of Cox & Wray at Wingfield, Ia.

W. G. Michael has taken over the market of Michael & Parks at Denver, Colo.

F. S. Busse has succeeded to the business of Busse & Ettelman in Decatur, Neb.

W. W. Dyer has purchased the market of Lawson & Jenkins at Keosauqua, Ia.

Seiter & Harris have acquired the market of Bassett & Harris at Greenwood, Ark.

Brittingham's market at Salisbury, Md., has been bought by Capt. L. P. Coulbourn.

C. Albert Parker has gone into the meat and provision business at Lawrence, Mass.

Neuhart Bros., of Woodfield, O., have bought the meat trade of Thomas Harper.

Elisha L. Dean, of Whitinsville, Mass., has taken over William T. Walsh's market.

Thompson & Krips have acquired the market of May, Krips & Co., at Alexandrie, S. D.

Whitney & Davis have purchased the meat business of W. Bodenheimer at West Plains, Mo.

Hunsaker Bros. have taken the meat business of Hunsaker & Robertson at Phoenix, Ariz.

F. E. Benjamin has taken possession of Fish & Cowell's market at Whitney Point, N. Y.

B. F. Garret, of Somerville, Ohio, has bought Mendenhall's market at Germantown, Ohio.

Rule & Weitz have been succeeded in the meat business of Basin, Mont., by John H. Rule.

Pummill & Conrad have been succeeded in the meat business at Houstonia, Mo., by M. Pummill.

J. M. Meek & Co. have opened a branch market on Beard and Dewey street, Shawnee, Okla.



Tempered and Tested

We guarantee our butchers' tools to stand the hardest kind of work. If they don't, you get your money back.

Every cleaver, chopper, knife, killing axe; in fact, every butchers' tool we make is tempered and severely tested individually.

We know what it means to you for the edge to turn or crack or the handle to bend.

Plumb's Tools

are made to guard against these faults.

If you want a tool you can feel sure of, look for our trade mark.

FAYETTE R. PLUMB, Incorporated,
Philadelphia, Pa., U. S. A.

May be bought of the following:

Koch Butchers' Supply Co., Kansas City, Mo.; Cincinnati Butchers' Supply Co., Cincinnati, O.; G. V. Brecht Butchers' Supply Co., St. Louis, Mo.; Bernard Gloekler, Pittsburg, Pa., and of the leading hardware jobbers.

V. J. Piazza & Co. have succeeded to the shop of Piazza, Davey & Co., at Central City, Colo.

Mrs. Emma Cupp has bought the market of her son Harry at Corning, N. Y., and will conduct it herself.

Butters & Smith have been succeeded in the meat and grocery business of Goldfield, Colo., by Ivory E. Smith.

S. L. Cant has sold his interest in the Central Meat Market at Argonia, Kas., to C. A. Race, and the firm is now Pope & Race.

Marcus Jaunes, Ida Lebovitz and Martin Lebovitz, of Denver, Colo., have incorporated as the Lebovitz Grocery and Market Company.

The Toledo, O., Retail Butchers' and Grocers' Association is holding a Pure Food Show and Industrial Exhibition. It opened November 28 and closes December 10. Large crowds have attended each session so far.

SCRIPTURE AND "BOB VEAL."

A country jury and audience had some fun last week at the hearing of a bob veal case in the Utica, N. Y., district. The attorney for the calf and the butcher who sold him is reputed—by a New York City butcher who heard him—to have summed up in the following merry and historical manner:

"Since the days when Abraham and Lot pastured their flocks in the beautiful plains of Jordan, humanity has fed on kids, lambs and calves, in the various stages of development, and the human race seems to have been fairly well preserved through all the ages since, without the aid of the New York State Agricultural law. In the past, when sacrifices were offered to the gods to increase the crops, or render a battle more bloody, we learn of no instance of a 'bob' veal offering angering them. Who knows the age of Abraham's ram, unless it be the veterinary surgeon who testified for the State? When the ancients sat down to a feed of kid, lamb or calf, no questions were asked as to whether it bore the seal of the 'bob' veal Commissioner of the State of New York, placed there at an expense of \$60 per month to this commonwealth.

"These modern 'bob' veal ferrets would have you, gentlemen of the jury, think that an occasional bout with a piece of 'bob' veal at table would so rapidly deplete the human race as to turn cemetery lots into gold mines. Shakespeare says: 'Physic to the dogs.' But he has no word of censure for 'bob' veal and he ate a lot in his day. These modern ringboned, knock-kneed and hoof-corned

scientists tell us what to eat in order to live longer; yet we don't begin to live as old as the ancients, and they didn't know a microbe from a tumble-bug. They worried along fairly well without milk laws, cheese laws, butter laws, bob veal laws and other job tricks. The human race is not such a pack of fools as to need veterinary visitors to the farms at \$8 per day and expenses to keep grown up people from eating frothy butter or from making their stomachs tabernacles for decomposed foods.

"Here's a man who says that he was not at the birth of the calf and had no statement from its mother or any one else as to when it was born. Yet he stands up and swears that the juvenile bovine is less than four week's old. He says that he didn't know whether this calf committed suicide or died of mumps, chilblains or natural causes. Such profound knowledge of 'bob' veals would have been of great aid to Noah in loading the ark had the Lord, in a reckless moment, dropped him upon the bosom of creation at that time. As only Noah and his household were to be saved, the difficulty could have easily been overcome by allowing this thing to walk in as an ass. Doubtless he could now tell us the sex of the golden calf which Moses dashed from its pedestal at the foot of Sinai, and whether it was the fact that it was a 'bob' calf that aroused the great prophet's ire on that occasion. I leave him and his senseless case to your tender mercies."

The castigation kept the court in a roar and made the lawyer famous. This scriptural argument, by the way, was before Justice Scripture.

HUGE BEEF BULK.

The biggest beef steer in the country died at Allen, O., some days ago. He weighed 3,600 lbs. and was not in the prime condition at that weight. This incident recalls the time in the old "Christmas beef" days when the trend was toward the bovine monster type of animal. This day and generation requires the quick growing, supposedly tenderer, but less nutritious because less matured, beef carcass. The popular commercial size now is 1,200 lbs. live weight. This animal, though only one-third the bulk of the deceased 3,600 pounder, grows off in two years, while it takes five to seven years to build up the old timer, who requires more feed to the pound of his weight to keep him growing or in condition as his age advances.

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